





**LOGARITHMIC TABLES**  
**OF**  
**NUMBERS AND TRIGONOMETRICAL FUNCTIONS**

**BY**  
**BARON VON VEGA.**

**TRANSLATED FROM THE**  
**FOURTH OR DEUTSCHES**  
**THOROUGHLY REVISED AND ENLARGED EDITION.**

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## P R E F A C E.

The existing logarithmic-trigonometrical Tables to seven figures may be divided into three classes. While the first class which contains the logarithms of the natural numbers is very nearly the same in all, they differ in the second, or trigonometrical part in this, that the first class contains the trigonometrical functions for the greatest part of the quadrant only for every full minute, the second for every tenth second, and the third for every single second. The oldest logarithmic table to seven figures belongs to the first class, viz. that of Sherwin, London, 1705. It contained the logarithms of the numbers from 1 to 101000 and besides the sines, tangents and secants, also their logarithms from minute to minute. This table had run through several editions by the end of the last century and served till quite recently as the basis of innumerable logarithmic tables, in some of which the natural sines and tangents, which are little wanted, were omitted, while others of them were enriched by more or less useful additions. Gardiner, who in the year 1741 prepared a third edition of Sherwin's table, constructed at the same time a table proceeding from 10 to 10 seconds, which was the first of its kind, and was published in London in the year 1742 in large 4<sup>to</sup> 1). A second edition of this table also in large 4<sup>to</sup> with the addition of the logarithms of the sines and tangents for every single second up to 4<sup>o</sup> was published at Avignon in 1770 2). Upon these were founded Callet's "tables portatives" which were first published at Paris in 1783 and afterwards stereotyped. On account

1) Tables of Logarithms.

2) Tables de Logarithmes.



of their more convenient shape they soon displaced the former tables, and maintained the preference up to the most recent time. The first table of the third kind is the large one by Taylor published in London in 1792. Bagay's tables<sup>1)</sup> founded upon it and published at Paris in 1829, appeared in a much smaller form in consequence of the smallness of the figures. To the tables of the first and second class belong also the logarithmic tables to seven figures calculated for the centesimal division of the quadrant, as that by Hobert and Ideler<sup>2)</sup> proceeding from  $100^{\text{th}}$  to  $100^{\text{th}}$  of a grade (centesimal degree), and that published by Delambre<sup>3)</sup> in the year IX of the republic, in which the interval is ten times as small, viz. 10 centesimal seconds.

For tables to five figures the interval of one minute may be considered the proper one, because the differences will not be too large to admit of the proportional part for seconds being mentally calculated with readiness. In tables to seven figures this interval has always been recognized as highly inconvenient, on which account Gardiner directed his attention to the diminution of the interval. It is even necessary to diminish the interval to one second, if it be made a condition that the proportional part in this case too is to be mentally calculated. This very small interval, however, gives rise to several new inconveniences, which diminish the advantage of smaller differences to such a degree, that tables of this kind have never come much into use, at least with professional computers. Their large form, the excessive number of columns on every page, and the circumstance that even then there is not nearly room enough for all the figures, (the initial figures of the logarithms having to be placed at the top of the columns and the differences altogether omitted, so that they must be calculated by the computer,) make the advantage of the smaller interval very questionable.

The editions of Vega's *Logarithmic Tables* hitherto published had, in the trigonometrical part, the interval of 1 minute. In the present revised edition care has been taken not only to adopt the interval of 10 seconds for the whole quadrant in order to assign a higher rank to the tables, but also to secure all those ad-

1) *Nouvelles Tables astronomiques et hydrographiques*. Paris, 1829.

2) *Neue trigonometrische Tafeln*. Berlin, 1799.

3) *Tables trigonométriques décimales, calculées par Ch. Borda*.



antages which by attention to size and arrangement might in any way contribute to facilitate the looking out of logarithms. Although the tables have in consequence been considerably enlarged, the price has not been raised, so that the advantages of the enlarged edition are offered to purchasers at a cost, which is unexampled for a work of this kind.

Among the improvements in these tables we may mention:

1. The *systematic arrangement* of all the pages of each section, which has for its object that, when once the book is opened at the proper page, the eye with very little practice will involuntarily be directed to the place where the required logarithm is to be found. For nothing so much increases the difficulty of using tables as a want of uniformity in the position of the numbers. To attain this end main and sub-divisions have been introduced, which are easily distinguished and afford resting points to the eye. In the first part there are four such resting points on every page, viz. on the left page the lines corresponding to the numbers 10, 20, 30 and 40 are enclosed in double rules; on the right page, those corresponding to the numbers 60, 70, 80 and 90. The intermediate lines, opposite to the numbers 1 up to 9, are again separated by narrow spaces into groups of three each. In the second part each page contains 61 lines. Since five principal divisions are thus formed, the third, which is opposite to the number 30 either from the top or from the bottom, is marked by stronger lines, the subdivisions remaining the same as in the first part. Finally in the third part the lines corresponding to full minutes are enclosed between double rules, and every fifth minute is marked by thicker rules. This arrangement which was first employed in a table of six figures<sup>1)</sup>, has at the same time the advantage, that both with ascending and descending arguments, as in the 2<sup>nd</sup> and 3<sup>rd</sup> part, the rules have always the same position relatively both to the right and left margin of the page, an advantage which was unattainable with the single horizontal lines hitherto in use.

2. The *type*. On several occasions Mathematicians and Astronomers have remarked, that the strongly shaded and equally high figures that have become the fashion during the last twenty years, though they present on the whole a better appearance on the page, are yet far less legible than the older ones. Moreover the new

1) *Logarithmorum VI decimalium nova tabula Berolinensis.* Berlin, 1852.



type is easily injured in the finer strokes so that 1 and 4; 0, 6 and 9; 3, 5 and 8 become almost undistinguishable. Besides it often happens, that a figure thus strongly shaded, which dazzles the eye by its very blackness, does not leave sufficient blank space, the figures being both too close to each other and to the rules which mark the intervals. All these circumstances render the use of the tables more difficult and more fatiguing to the eye. Hence a type has been chosen which, being extremely slightly shaded, approaches the older form, projects partly above and below the parallel lines which inclose the main body and does not cover the white ground too much, while it is of a size which is neither too small to be easily recognized by moderately strong eyes, nor too large to get the requisite quantity into a moderate compass. The founding of this type is so characteristic that even after slight injuries which are inevitable after long use, there will be little fear of mistakes. Special attention has been paid to the proper distribution of the space which the figures and rules occupy; and the size of the page was not fixed upon till after repeated trials, and after all circumstances had been taken into account for facilitating the use of the tables.

3. In the trigonometrical part there is frequently a column next to that of the degrees, minutes and seconds, expressing the same arc in time; there are also in the first part one or two columns more which give the number, or the number increased ten-fold, considered as a number of seconds expressed in degrees, minutes and seconds. This and similar other arrangements have here been omitted, as double and treble arguments, which are not out of place in nautical tables, but tend to obstruct the simple use of a table to seven figures without affording any equivalent advantage. On the other hand, in the first part at the foot of the page the twofold reduction of the argument into arc has been indicated, together with the logarithms of  $\frac{\sin x}{x}$  and  $\frac{\tan x}{x}$  from 10 to 10 seconds, from 0 to  $2^{\circ} 46' 40''$ . The latter are required for passing from logarc to logsin and logtan, and are of particular value in geodetic calculations, where long operations have sometimes to be performed with small arcs which are usually expressed in seconds, while four or five decimal places of the second have to be retained.

To facilitate the interpolation, small tables of proportional parts



have been added in the first and third parts. The use of smaller type has enabled us to give them completely even in the first pages for every difference. These tables give accurately the tenths of the whole difference, so that the addition of the tenths, hundredths and thousandths gives the proportional part correct to the last figure, which is not the case with the usual arrangement. According to a very common arrangement the same small table of proportional parts has to be used for the whole extent of the table in its vicinity, without reference to the difference whether it be an unit more or less; but this has been rejected as inaccurate. In the third part want of space has prevented all the differences from being given; at the commencement, i. e. beginning at  $1^{\circ}$ , those only could be inserted which differed by 10 units, then those differing by 6, by 3 etc., while finally, from  $24^{\circ}$ , each difference is set down. The advantages which these tables afford in interpolation, will be best appreciated by those, who have felt their want in all other tables.

Special attention has been paid to the correctness of the seventh decimal place. Since the accurate value of a logarithm, unless it be a whole number, is always an interminable decimal fraction, the part which follows the first seven figures necessarily amounts to more or less than five units of the 8<sup>th</sup> decimal place. In the former case the number in the seventh place must be increased by one unit, in the latter not, in order that the tabular value may always differ by less than half an unit of the last place from the true value of the logarithm. Therefore in order to set down the seventh place correctly, a knowledge of the following figures is required. A comparison with Vega's *Thesaurus logarithmorum*<sup>1)</sup> left only those logarithms of numbers doubtful, whose logarithms to ten figures ended with 5000; these were therefore recalculated to fifteen places. The tenth figures proving accurate throughout, even in many other cases where the computation was repeated, it was found unnecessary to recalculate the logarithms ending in 499 and 501. The case was however far different in the trigonometrical section. Here the *Thesaurus logarithmorum*<sup>1)</sup>, with the exception of a few cases as indicated by Vega himself and referring to that part of the table in which the interval is 10 seconds, can hardly be considered as anything but a reprint from

1) *Thesaurus logarithmorum completus*. Lipsiæ, 1794.



been corrected, (most of them being reprinted unaltered), the editors of tables have taken its correctness for granted, either to avoid the trouble of a strict examination, or confiding in the accuracy implied by the offer of a ducat for the detection of every error, no similar reward having ever been previously offered. This affords the only explanation of the fact, that in more recent tables several logarithms have been brought back to the erroneous values which follow from Vlack's table, though they are correctly given by Gardiner. Thus 1) the logsin  $2^{\circ} 29' 50''$ , whose accurate value is 8.63919705001389 has with Gardiner 1 in the seventh place which is correct; but since Vlack and Vega give the log to ten figures 8391970499, we find in the recent tables and also in Taylor 0 in the seventh place. 2) logtan  $5^{\circ} 7' 40''$  is 8.95296824994086; Vlack and Vega give 9529682501; Gardiner gives 2 in the seventh decimal place; the more recent tables, including Taylor's give 3. 3) logtan  $7^{\circ} 23' 50''$  is 9.1133684409147; and therefore 5 is the correct figure in the seventh place, but Vlack and Vega have 1133684409, whence the recent tables including Taylor's give 4. 4) logtan  $7^{\circ} 59' 0''$  is 9.146884950167; therefore 9 is the correct seventh figure; but Vega and Vlack have 1468849501, and the modern tables have consequently 10 as the last two figures. 5) logsin  $20^{\circ} 9' 0''$  is 9.5371628499411, but in Vlack and Vega 5371628499; Gardiner gives 9, the modern tables 8 in the 7<sup>th</sup> place.

The second edition of Gardiner published in the year 1770 at Avignon contains besides all the logarithms of the first edition, which were adopted without alteration<sup>1)</sup>, the logarithms of the sines for every second from  $72'$  to  $4^{\circ}$ , and log tan for every second from 0 to  $4^{\circ}$ . The logarithms thus added have not the same degree of accuracy as those transferred from the older table, though their correctness is still such as might well have served as a pattern for later tables. For a comparison showed that out of 22032 logarithms only 22 were wrong by an unit. Both these editions are in large 4<sup>o</sup>, which renders them cumbersome. For this reason and in consequence of Gardiner's tables becoming scarce, Callet edited a new logarithmic-trigonometrical table, which was printed by Firmin Didot, and was the first, in which the printing

1) A few false prints, discovered during the 28 years that the tables had been used, were corrected, but many new errors were introduced.



from plates was successfully carried out. Besides a long introduction on the calculation and application of logarithms, tables of the natural sines and cosines, tangents and cotangents, and natural and common logarithms of numbers to 20 and 60 figures, this edition contained all the logarithms of the Avignon edition, with this addition that the log sin and log tan for every second which the latter contained up to  $4''$  were carried one degree farther. But in this enlargement, the degree of accuracy introduced by Gardiner is utterly neglected. A comparison with this part of the tables which contains 6480 logarithms not occurring in Gardiner gave 1368 logarithms inaccurate by an unit in the last place. Finally the last figure of each of the 36000 logarithms of the second part was compared with Taylor's table, which is generally considered as a pattern of accuracy in the last figure, and every deviation thus found was subjected to a separate investigation. This examination gave 35 cases, in which the last figure in Taylor is wrong by an unit; of these 19 coincide with the erroneous statement in the Avignon edition.

A comparison of the logarithms of the first part with Babbage's most carefully edited table, in which elementary principles regarding the construction of tables were first established, furnished one case, that of  $\log 52043$  which, as in Gardiner, was given too great by an unit. The same error occurs also in the tables of Callet, Taylor, Delambre and others, evidently because all have copied Gardiner without farther examination.

The first two proofs of this table were corrected by MM. Lautebach, and Goblanner, and a third revision was instituted by myself, and checked by differences. After they were stereotyped the proofs from the plates were revised partly by Mr. Volkmann, and partly by Mr. Koch.

Berlin, August 1850.

BREMIER.







a number of five figures in the integer part from the given number either by annexing cyphers or by separating the first five figures; find the fractional part of the logarithm of this number, and give an index less by one unit than the number of figures in the integer part of the given number. The index of a proper fraction is found by subtracting the number of cyphers between the decimal point and the first significant figure from 9.

*Given a logarithm, required the corresponding number.*

A logarithm being given, and it being required to find the corresponding number, we first look out the first three figures of the decimal fraction in the logarithm in the column headed 0, and then in the columns headed 0, 1, 2 . . . those four figures, which are next less than the remaining four figures of the given logarithm. We now take out from the vertical column headed N the number consisting of the four figures, which are on the same horizontal line that contains the last four figures, and as fifth figure, the one at the head of the column. For example, if the logarithm 2.5833980 be given, we find at p. 62 the logarithm 583 3915, to which corresponds the number 38317. The difference between it and the next greater logarithm is 118, whilst the difference between it and the given logarithm is 65. Now the figures following the first five places are found by dividing 65 by 118, that is to say, the next figure is obtained by taking this fraction 10 times, the two next by taking it 100 times, the three next by taking it 1000 times. It would be inexpedient to take more, because even the third figure is uncertain. But this division may be facilitated by the table of proportional parts headed 118. We take from it the next figure 5 corresponding to 56.5 which is next inferior to 65; subtracting 56.5 from 65, there remains 8.5. Taking this tenfold, which gives 85, we find opposite to the next inferior number 79.1 the number 7 as the next figure in the number, and again increasing the difference  $85 - 79.1 = 5.9$  tenfold, which gives 59, and looking for the next inferior number in the table (which is 56.5) we find the figure 5, hence the figures following the first five are 575, and the number is written with the figures 38317575; and since the given logarithm has the index 2, the decimal point must be put after the third figure; therefore the required number is 383.17575. The index, however, might have any other value, the number would still consist of the same figures, only the po-



sition of the decimal point would change; thus if the logarithm were 9.5833980, the corresponding number would contain an integer part of 10 figures. But since the tables furnish only the first eight figures of the number, as found above, two cyphers must be annexed, giving the number 3831757500. If the logarithm were 7.5833980—10, the corresponding number would be 0.0038317575. Hence the computation of the proportional part which with a little practice and by making use of the small table of proportional parts may be made mentally, (so that no other figures need be written down than those actually sought), would stand thus:

$$\begin{array}{rcl}
 \text{Given logarithm} & . & . & . & . & 2.5833980 \\
 \text{pag. 62. number 383.17} & . & . & . & . & 2.5833915 \\
 & & & & \text{Difference} & 65 \\
 \text{by the table for the difference 113} & 5 & . & . & . & 56.5 \\
 & & & & & \underline{85} \\
 \text{again} & . & . & . & . & 7 & . & . & . & 79.1 \\
 & . & . & . & . & 5 & . & . & . & \underline{59} \\
 \text{required number} & = & 383.17575
 \end{array}$$

In logarithmic calculations cases occur, in which the logarithm of a logarithm has to be taken. If for example a number is to be raised to a power, whose exponent is a number of many figures, or a similar root has to be extracted, we should have to multiply or divide the logarithm of the given number by another large number; but this is again best done by the aid of logarithms. As a first example let it be required to raise the number 23.90087 to the power 1.1087023; here we take the log of 23.90087 which is = 1.3784137; and this must be multiplied by 1.1087023; hence we add the logarithms of both the numbers

$$\log 1.3784137 = 0.1393796$$

$$\log 1.1087023 = 0.0448149$$

$$\log 1.5282504 = 0.1841945$$

and look out the number 1.5282504 corresponding to their sum. This is the logarithm of the required power; hence this power is the number, corresponding to this logarithm, viz. 33.748186. Again, to take a second example, required the 7.001705<sup>th</sup> root of 0.791; here we should have to divide the log of 0.791 which is 9.8981765 — 10 by the index of the root. Now in this case the dividend is a difference, and it is simpler to restore the negative logarithm



and to divide it than to divide the two terms of the difference separately, and to get the quotient by the subtraction of the results. Now the negative logarithm is  $= -0.1018235$ ; hence

$$\log 0.1018235 = 9.0078480 - 10$$

$$\log 7.001705 = 0.8452038$$

$$\log 0.0145427 = 8.1626442 - 10$$

Corresponding to the difference  $8.1626442 - 10$  we find the number 0.0145427, which is the logarithm of the root; but it is negative, since it has arisen out of the division of a negative logarithm by a positive number; hence the tabular-logarithm is  $10 - 0.0145427 - 10 = 9.9854573 - 10$  and the corresponding number is  $-0.9670687$  which is the required root.

### TABLE II.

Table II, (p. 188 to p. 287) serves to find  $\log \sin$  and  $\log \tan$  of an arc not greater than  $5^\circ$ , or the  $\log \cos$  and  $\log \cot$  of an arc lying between  $85^\circ$  and  $90^\circ$ . The left hand page of the table contains the logarithms of the sines of arcs between 0 and 5 degrees. Degrees and minutes are given at the top, the seconds on the left hand margin. These logarithms are at the same time the  $\log \cos$  of the complementary angles, the degrees and minutes of which are indicated at the bottom of the page, the seconds on the right hand margin. Thus according to p. 210  $\log \sin 1^\circ 11' 46'' = 8.3196173$ , which is also  $\log \cos 88^\circ 48' 14''$ . The right hand page is constructed exactly similarly with regard to  $\log \tan$  of arcs between 0 and  $5^\circ$  and  $\log \cot$  of arcs between  $85^\circ$  and  $90^\circ$ .

*Given an arc, required its  $\log \sin$  or  $\log \tan$ .*

For every full second the  $\log \sin$  and  $\log \tan$  are given in the table. If the arc contains additionally a fractional part of a second, the proportional part has to be calculated in the same manner as for the logarithms of numbers. For this purpose, the logarithm corresponding to the integer part of the seconds in the given arc is subtracted from the log corresponding to the next full second, or *vice versa*, the difference is multiplied by the fractional part of the second in the given arc, and the product added to, or subtracted from the former logarithm, according as the logarithms go on increasing or decreasing; the former being here the case for descending arguments and the latter for ascending



arguments. Thus let it be required to find  $\log \sin 2^\circ 19' 49''.71$ . At page 234 we find  $\log \sin 2^\circ 19' 49'' = 8.6091653$ , differing from the next greater log of  $\sin 2^\circ 19' 50''$  by 518, which multiplied by 0.71 gives 367.78 instead of which we take 368. Adding this proportional part to the preceding logarithm we get 8.6092021 as the required  $\log \sin 2^\circ 19' 49''.71$ .

As a second instance let us find  $\log \cot 86^\circ 53' 11''.374$ . According to p. 251 this log lies between 8.7355695 and 8.7355307 the difference of which is 388; multiplying this by 0.374 we get 145 which has to be subtracted from the former of these logarithms since they decrease for ascending arguments; hence the required log is 8.7355550.

*Given the log sin or log tan of an arc, required the arc.*

The process of finding the arc corresponding to a given log sin or log tan by means of table II is exactly the same which is adopted in finding the number corresponding to a given logarithm in table I. We look out the logarithm either next above or next below the given one, according as the logarithms increase or decrease with the increase of the arc; form the difference between it and the given logarithm, and divide it by the whole difference between the two consecutive logarithms of the table between which the given log lies. The quotient is the fractional part of a second which has to be added to the whole number of seconds contained in the arc corresponding to the logarithm, from which we had started; for example let 8.5139150 be the given log cos. The next greater log of the table is according to page 224, 8.5139642, differing from the given one by 492, but from the next smaller one in the tables by 645; hence the arc is that corresponding to the preceding logarithm, which is  $88^\circ 7' 43''$  increased by  $\frac{492}{645}$  or  $0''.763$ , i. e.  $88^\circ 7' 43''.763$ .

When a calculation refers to arcs under 30 minutes, and it is required that the seventh decimal place of the logarithms shall be perfectly accurate, a condition which occurs in higher goodness, we have to take into account five decimal places in the seconds in passing from the arc to log sin and log tan, or *vice versa*. In this case the use of table II becomes inconvenient both in consequence of the long multiplications and divisions in calculating the proportional parts, and because it would be necessary



to take into account second differences. Here the application of table I is preferable. To find from it the logsin or logtan of an arc, convert it into seconds, take the log of the number of seconds, and add to it the corresponding value of S or T, given at the bottom of the page, each of which begins with 4.685. Thus if it be required to find logsin and logtan of  $22^{\circ} 58' 7083$ , we have (see p. 13)

$$\log 1377.7083 = 3.1391573$$

$$S\ 22^{\circ} 58'' = 4.6855716$$

$$T\ 22^{\circ} 58'' = 4.6855813$$

$$\log \sin = 7.8247289$$

$$\log \tan = 7.8247386$$

where in interpolating we have only to take account of whole seconds. If the arc were  $137^{\circ} 777083$ , we should as before take log arc from p. 13, but the numbers S and T with the argument  $2^{\circ} 18''$ ; from p. 2; thus we should have

$$\log 137^{\circ} 777083 = 2.1391573$$

$$S\ 2^{\circ} 18'' = 4.6855748$$

$$T\ 2^{\circ} 18'' = 4.6855749$$

$$\log \sin = 6.8247321$$

$$\log \tan = 6.8247322$$

If conversely, it be required to find the arc corresponding to a given logsin or logtan, we first take the arc to the nearest second below from table II, and look out in table I the corresponding values of S and T; we subtract these from the given logarithm and take out the number corresponding to the difference, which gives the required arc in seconds. Thus let 7.1690522 be a given logtan. According to p. 189 the corresponding arc lies between  $5^{\circ} 4''$  and  $5^{\circ} 5''$ ; at p. 3 the value of T is 4.6855752, hence

$$\log \tan \quad . \quad . \quad . \quad 7.1690522$$

$$T\ 5^{\circ} 4'' \quad . \quad . \quad . \quad 4.6855752$$

$$\text{Difference} \quad 2.4834770 = \log 304.4227$$

hence arc =  $304''.4227$  or  $5^{\circ} 4''.4227$ .

In this method it would be necessary to refer to two or even three different places of the tables; to avoid this inconvenience a table has been added at p. 375 which for arcs up to  $33^{\circ}$  gives with much more readiness all transitions between S, arc and log sin as well as those between T, arc and logtan. For extensive geodetic calculations this table may be taken out of the book and mounted on cardboard, to be used as an auxiliary table, besides



which we require only the table of logarithms of the numbers of the seconds in the arc. In regard to the construction of this table, it is to be observed, that the value of  $S = 4.6855749$  holds up to  $1' 39''$  and  $\log \sin 6.681$ . From  $1' 40''$  or  $\log \sin = 6.682$  . . . the succeeding value of  $S = 4.6855748$  is to be used. All other values of  $S$  answer accurately to the arcs and  $\log \sin$  on the same line with them, so that in passing from the arc or  $\log \sin$  to the number  $S$  that value of  $S$  has to be taken, which lies nearest to the given arc or  $\log \sin$ . The same rule holds for  $T$ . Hence, except for a few values of  $S$  and  $T$  towards the end of the table which increase by 10 units at a time, all interpolation is avoided, as with a glance at the table we can at once take out the required  $S$  or  $T$ .

## TABLE III.

This table contains for every ten seconds of the quadrant the logarithms of the sines, cosines, tangents, and cotangents. From  $0$  to  $45^\circ$  the degrees are placed at the top of the page; the minutes and seconds, denoted with  $'$  and  $''$  on the left hand margin, which is to be combined with the heading at the top of the page. From  $45^\circ$  to  $90^\circ$  the degrees are put at the bottom of the page, the minutes and seconds at the right hand margin, and the name of the trigonometrical function at the foot of the column. Arguments that are opposite one another are complementary (i. e. make together  $90^\circ$ ) and the sines and tangents (i. e. their logarithms) of an arc above  $45^\circ$  are also placed opposite to the sines and tangents of its complement, because the former are respectively the cosines and cotangents of the latter, and *vice versa*. For the sake of symmetry the sine is placed next to the argument, next to it the tangent, which is followed by the cotangent, and this by the cosine; and since for complementary angles the same logarithms hold, but in an inverse order, there is again next to the argument the sine, followed in order by the tangent, cotangent, and cosine, as may be seen by the names at the top and bottom of the columns. The differences of any two consecutive logarithms are placed for the sine and cosine immediately to the right on the intermediate line, and are headed  $d$  (differentia); for the tangents and cotangents they are also placed between these columns on the intermediate line and are headed  $d. c.$  (differentia communis) since these differences hold for both. The sines



and cosines of all arcs in the quadrant are proper fractions, and so are the tangents for arcs below  $45^\circ$ ; hence their logarithms would be negative. But the index and the fraction have been made positive by the addition of 10, so that -10 has to be supplied. For tangents of arcs between  $45^\circ$  and  $90^\circ$  this supplement must be omitted.

*(Given an acute angle, required its sine (logsin).)*

As the table contains the sine only for every tenth second, we have to interpolate for the units and its decimal parts. This is done, as in the case of the logarithms of numbers, by multiplying the decimal fraction formed by the tenth part of the units with the appended fraction by the difference, and adding the product to the logsin of the next inferior multiple of  $10''$ ; for example let it be required to find logsin  $18^\circ 15' 27''.21$ . Here the sine of  $18^\circ 15' 20''$  is 0.3104431, which differs from the next in the table by 616; multiplying this by 0.721 we get 444, which added to the preceding logarithm gives 9.5004935, the number required. The formation of this product, when no separate auxiliary table of proportional parts<sup>1)</sup> is employed, is facilitated by the small tables of differences on the margin. Since for want of space it has not been possible to put down all these differences we in every case take the nearest; in the present instance we take that for 614. It gives

|                     |       |
|---------------------|-------|
| for 0.7 . . . . .   | 429.8 |
| for 0.02 . . . . .  | 12.3  |
| for 0.001 . . . . . | 0.6   |
| together            | 442.7 |

But since the difference 616, is greater by 2 than 614, we have to add  $0.721 \times 2 = 1.4$ , which gives 444 as the proportional part. Similarly we might have made use of the table headed 617 on the left hand page, which would have given 444.9 and from this we would have had to subtract  $0.721 \times 1$  i. e. 0.7, so that the result would have been the same.

*(Given an acute angle, to find its tangent (logtan).)*

The logarithms of the tangents like those of the sines go on

1) Bremker, *Tafel der Proportionaltheile* (Table of proportional parts). Berlin, Ferd. Dümmler, 1842.



increasing as the arc increases from 0 to  $90^\circ$ , so that the proportional part has again to be added. Its computation is exactly like that for the sine: the tenth part of the number formed of the units and the decimal part of the seconds is multiplied by the whole difference and the product added to the logtan of the next inferior arc in the table, and here again, if better means are wanting, recourse may be had to the small difference tables in the margin. Thus let it be required to find  $\log \tan 56^\circ 22' 3''.89$ . At page 491 we find  $\log \tan 56^\circ 22' 0'' = 0.1770234$ , differing from the next greater tangent by 457 (a difference found above the logarithm since the argument is ascending). The small table for 457 gives

|           |       |                     |
|-----------|-------|---------------------|
| for 0.3   | . . . | 137.1               |
| 0.08      | . . . | 36.6                |
| 0.009     | . . . | 4.1                 |
| for 0.389 | . . . | <u>177.8</u> or 178 |

Adding 178 to the preceding log, we find 0.1770412 the required logtan.

We may here observe, that a computer who has had some little practice, shortens the calculation of the proportional parts very materially; and in the last example he would not write down any figures excepting those in the required logarithm. He would proceed in the following manner. Having opened the book at the proper page, in this case p. 491, he points with a finger of the left hand to  $\log \tan 56^\circ 22' 0''$ . A glance shews, that 457 is the proper difference. (A practised computer in order to avoid the risk of a mis-print will verify at the same time, that this is really the difference of the two logarithms standing one above the other.) Keeping the finger of the left hand pointing, he takes from the small table headed 457 with the argument 0.389 first 4.1 for the last figure 9; this he adds mentally to 36.6, which corresponds to the second figure 8; this again gives 40.7, which is added to 137.1, which number is opposite to 3. The sum 177.8 for which 178 is taken, is added to the last four figures 0234 of the logarithm, to which the finger points; this gives 0412 as the last four figures of the required log. These are finally read together with the first figures 0.177, and written down in their proper place on the paper on which the calculation is made. The mental calculation is much facilitated by acquiring the habit of forming the sums of two numbers not as usual from right to left, but from left to right, which has



the advantage of giving the last four figures of the logarithm in this order, and enables the calculator to write down from left to right the whole logarithm, consisting of eight figures. Reading sums and differences of two logarithms placed one above the other from left to right has in general many advantages in calculations, both because it is more convenient to write from left to right, and because we may use the number thus read as the argument for looking out the corresponding arc, without writing down the number itself, which is frequently no further needed.

*Given an acute angle to find its cotangent.*

The logarithms of the cotangents and tangents of the same arc always have the same sum 10, or properly 0, since we have mentally to supply either to the tan or cot the number  $-10$ . Hence the cotangents continually decrease as the arc increases from 0 to 90°, and the proportional part which has to be calculated with the same difference as the tangent must be subtracted. Thus let it be required to find logcot 14° 55' 18".02. At page 379 we find first the logarithm 0.5743969 as logcot 14° 55' 10" with the difference 846. The small table for the difference 846 gives for 8.02 the proportional part 677.7, which on account of the difference being greater by 1 has to be increased by 0.8, giving 678.5; this subtracted from the above number leaves 0.5743281 the required logcot.

*Given an acute angle, to find its cosine.*

The cosine is found in the same manner as the logcot, because it, too, decreases continually with the increase of the acute angle. If the angle is 45° 41' 44".25, we subtract from logcos 45° 41' 40" which is 9.8441669 with the difference 216 (see p. 555) the product of 0.425  $\times$  216, i. e. 92, which gives the required logcos = 9.8441477.

*Given a logsin, cos, tan or cot, required the corresponding acute angle.*

When the acute angle corresponding to a given logarithm of a trigonometrical function has to be found from the table, two cases must be distinguished, according as the logarithms and arc do or do not increase simultaneously. In the former which is that of the sines and tangents we look out the next smaller logarithm, subtract it from the given one and divide this difference



by the whole difference between it and the next greater logarithm in the table. The quotient being put in the form of a decimal fraction, the decimal point is moved one place to the right, and the result will be the number of units and parts of an unit of a second, which have to be taken together with the arc corresponding to the log from which we started. The division may be executed by the aid of the tables of differences. Example:  $\log \sin$  being 9.8725738 we find at p. 540 the next smaller  $\log \sin$  9.8725654, corresponding to the arc  $48^\circ 13' 10''$ , and differing from the given log by 84, whilst the whole difference is 188; now a glance at the small table headed 188 shews that 84 contains 0.4, and opposite 4 the table gives 75.2, the number next below 84, and differing from it by 8.8. These, according to the same table, give 0.04 with a remainder 1.3, because 7.5 corresponds to .04; this remainder 1.3 gives .007 more; hence the whole decimal fraction is 0.447. Moving the decimal point one place to the right, we get 4.47 as the number of seconds which, added to  $48^\circ 13' 10''$ , give  $48^\circ 13' 14''.47$  for the required arc.

Should the margin not contain a difference table for the whole difference we may make use of the one calculated for the next greater or smaller number, provided only we increase or diminish the numerator of the required fraction in the same proportion. Let the given fraction be  $\frac{P}{Q}$ , and let the table for  $Q \pm q$

be used; it suffices to take instead of  $P$  the number  $P \pm \frac{P}{Q}q$  and use this as argument. Thus if there be given  $\log \tan = 9.2632000$ , the next smaller  $\log \tan$  (see p. 352) is 9.2631240, and the difference 760 has to be divided by 1188. If now the table for 1180 be used, we must take  $760 - \frac{760}{1188} \times 8 = 760 - 5 = 755$  instead of 760; and corresponding to this we find by the table 0.640. Similarly we might make use of the table for 1190, in which case we must increase 760 by  $2 \times \frac{760}{1188}$  or by 1; and corresponding to 761 the table for 1190 gives the same result, viz. 0.640. Hence the arc corresponding to the given  $\log \tan$  is  $10^\circ 23' 16''.40$ .

When the logarithms decrease with the increase of the arc, which is the case with the cot and cos, the next greater logarithm is looked out, from it the given one is subtracted and this diffe-



rence divided by the whole difference; the rest of the process remains as before. For example let  $\log \cos = 9.7107395$ ; at p. 475 we find  $\log \cos 59^\circ 5' 10'' = 9.7107512$  which is next greater than the given one, differing from the given log by 117, whilst the whole difference is 352, and by the small table for 352 we get  $\frac{117}{352} = 0.332$ ; hence the arc is  $59^\circ 5' 13''.32$ .

When the sines are to be determined for an angle exceeding  $90^\circ$ , we subtract from it one, two, or three right angles as the case may be, and take the sine of the remaining acute angle when two right angles have been subtracted, but take the cosine when one or three right angles have been subtracted. It is to be observed, besides, that the sines are negative in the third and fourth quadrants, which is denoted by an n annexed (as an index) to the logarithm. In like manner  $\log \cos$  of an angle exceeding  $90^\circ$  is found by first taking from it one, two, or three right angles, and then determining respectively the sine, the cosine or the sine of the remainder, and observing that the cos is negative in the second and third quadrants, which again is indicated by annexing an n to the logarithm. For tangents and cotangents which are negative in the second and fourth quadrants the same interchange has to be made, when 1 and when 3 right angles have been subtracted. These relations are shown in the following tabular form, in which  $z$  represents an angle in the first quadrant, so that  $90^\circ + z$ ,  $180^\circ + z$  and  $270^\circ + z$  lie in the second, third, and fourth quadrants respectively.

| arc             | sine      | cosine    | tangent   | cotangent |
|-----------------|-----------|-----------|-----------|-----------|
| $z$             | $+\sin z$ | $+\cos z$ | $+\tan z$ | $+\cot z$ |
| $90^\circ + z$  | $+\cos z$ | $-\sin z$ | $-\cot z$ | $-\tan z$ |
| $180^\circ + z$ | $-\sin z$ | $-\cos z$ | $+\tan z$ | $+\cot z$ |
| $270^\circ + z$ | $-\cos z$ | $+\sin z$ | $-\cot z$ | $-\tan z$ |

From this table it appears conversely, that corresponding to a given value of every trigonometrical function, when its algebraic sign is unknown, four different arcs in the first four quadrants may be found; and two when the sign is given. If for example a  $\log \cos$  with n annexed is given, so that the cosine is negative, this taken positively may be looked out in the column of the cosines, when  $180^\circ$  have to be added to the corresponding



acute angle; or it may be found as the sine of an acute angle which increased by  $90^\circ$  has the given cosine. For an arc to be completely determined by a trigonometrical function we require, besides the sign of this function, also that of any other trigonometrical function of the same arc, provided the two are not tan and cot, or we must know from other sources in what quadrant the arc lies. Trigonometrical calculations are usually so arranged, that for the determination of an arc the logarithms of two numbers, respectively proportional to the sine and cosine, with their proper signs are finally obtained, so that no doubt remains as to the quadrant. For if the logarithms of a  $\sin A$  and a  $\cos A$  are given, their difference is  $\log \tan A$ , and  $A$  lies in the first or third quadrant, according as  $\sin A$  and  $\cos A$  are either both positive or both negative, the tangent being positive; or  $A$  lies in the second quadrant, when  $\sin A$  is positive, and  $\cos A$  negative; finally  $A$  lies in the fourth quadrant when  $\sin A$  is negative and  $\cos A$  positive, in both which cases  $\tan A$  is negative. Hence in the first case (when  $\tan A$  is positive), the logarithm is looked out amongst the tangents, and the corresponding acute angle is taken out, or that angle increased by  $180^\circ$ ; in the second case, when the tangent is negative, we look out the log in the column of cotangents, take out the corresponding acute angle and increase it by  $90^\circ$  or  $270^\circ$  respectively. The angle  $A$  being found, the subtraction of  $\log \sin A$  from the first or of  $\log \cos A$  from the second number gives  $\log a$ . The following examples will serve to illustrate these rules.

|                 |                       |                         |                        |                         |
|-----------------|-----------------------|-------------------------|------------------------|-------------------------|
| $\log a \sin A$ | 8.0857112             | 9.5028101               | 1.8839108n             | 8.1158505n              |
| $\log a \cos A$ | 2.7130088             | 9.6729909n              | 2.0057687n             | 7.9210259               |
| $\tan A$        | 0.3727024             | 9.8298192n              | 9.8781421              | 0.1948246n              |
| $A$             | $67^\circ 1' 34''.65$ | $145^\circ 56' 56''.80$ | $217^\circ 3' 54''.67$ | $302^\circ 33' 32''.76$ |
| $\sin A$        | 9.9641106             | 9.9188138n              | 9.9019759n             | 9.9257435n              |
| $\cos A$        |                       |                         |                        |                         |
| $\log a$        | 3.1216006             | 9.7546771               | 2.1087928              | 8.1901070               |

In these examples  $a$  has been regarded as positive; if  $a$  is assumed to be negative, the arc  $A$  will change by  $180^\circ$ ; the  $\tan A$  which serves only as argument need not have been written down in the preceding calculation.



L

T A B L E

OF BRIGGS' OR COMMON

L O G A R I T H M S

OF THE NATURAL NUMBERS

FROM 1 TO 100000.







| N.  | Log.     | N.  | Log.     | N.  | Log.      | N.  | Log.      | N.  | Log.      |
|-----|----------|-----|----------|-----|-----------|-----|-----------|-----|-----------|
| 250 | 397 91-1 | 300 | 477 12-1 | 350 | 554 068-5 | 400 | 632 068-5 | 450 | 651 212-8 |
| 251 | 399 67-7 | 301 | 478 56-6 | 351 | 555 30-7  | 401 | 633 24-1  | 451 | 652 17-5  |
| 252 | 401 40-5 | 302 | 480 00-9 | 352 | 556 54-2  | 402 | 634 26-4  | 452 | 653 13-4  |
| 253 | 403 13-8 | 303 | 481 44-6 | 353 | 557 27-7  | 403 | 635 30-5  | 453 | 654 09-2  |
| 254 | 405 84-7 | 304 | 483 37-6 | 354 | 559 0-3   | 404 | 636 38-3  | 454 | 655 05-9  |
| 255 | 406 54-3 | 305 | 485 29-8 | 355 | 559 32-4  | 405 | 637 45-5  | 455 | 656 01-4  |
| 256 | 408 24-0 | 306 | 486 23-4 | 356 | 559 45-1  | 406 | 638 51-6  | 456 | 656 96-8  |
| 257 | 409 91-1 | 307 | 487 14-8 | 357 | 558 66-8  | 407 | 639 59-1  | 457 | 659 01-2  |
| 258 | 411 61-7 | 308 | 488 55-2 | 358 | 559 00-4  | 408 | 640 66-2  | 458 | 659 86-5  |
| 259 | 413 29-8 | 309 | 489 55-5 | 359 | 559 02-1  | 409 | 641 72-1  | 459 | 660 81-2  |
| 260 | 414 97-1 | 310 | 491 50-7 | 360 | 559 30-8  | 410 | 642 28-9  | 460 | 661 25-8  |
| 261 | 416 61-5 | 311 | 493 26-3 | 361 | 559 50-2  | 411 | 643 34-8  | 461 | 662 20-9  |
| 262 | 418 30-1 | 312 | 494 18-6 | 362 | 559 50-6  | 412 | 644 39-2  | 462 | 663 16-7  |
| 263 | 419 58-7 | 313 | 495 54-1 | 363 | 559 50-6  | 413 | 645 43-3  | 463 | 664 58-10 |
| 264 | 421 60-9 | 314 | 496 02-6 | 364 | 561 10-4  | 414 | 647 00-3  | 464 | 666 31-0  |
| 265 | 423 23-9 | 315 | 498 12-6 | 365 | 562 29-9  | 415 | 648 13-8  | 465 | 667 43-9  |
| 266 | 424 58-6 | 316 | 499 68-7 | 366 | 563 48-1  | 416 | 649 19-3  | 466 | 668 38-9  |
| 267 | 426 31-1 | 317 | 501 06-9 | 367 | 564 66-6  | 417 | 650 16-6  | 467 | 669 31-6  |
| 268 | 428 13-8 | 318 | 502 42-7 | 368 | 565 54-2  | 418 | 651 17-6  | 468 | 670 23-9  |
| 269 | 429 23-1 | 319 | 503 29-7 | 369 | 567 03-1  | 419 | 652 21-1  | 469 | 671 17-8  |
| 270 | 430 50-6 | 320 | 505 14-1 | 370 | 568 20-7  | 420 | 653 24-3  | 470 | 672 07-9  |
| 271 | 432 26-1 | 321 | 506 50-5 | 371 | 569 31-9  | 421 | 654 28-2  | 471 | 673 02-9  |
| 272 | 434 36-9 | 322 | 507 35-9 | 372 | 569 54-2  | 422 | 655 43-8  | 472 | 674 04-0  |
| 273 | 436 16-6 | 323 | 509 20-3 | 373 | 571 20-8  | 423 | 656 44-3  | 473 | 674 56-1  |
| 274 | 437 33-6 | 324 | 510 54-5 | 374 | 572 31-0  | 424 | 657 46-3  | 474 | 675 27-3  |
| 275 | 439 13-7 | 325 | 511 33-4 | 375 | 574 01-1  | 425 | 658 38-9  | 475 | 676 69-10 |
| 276 | 440 29-1 | 326 | 513 21-6 | 376 | 575 16-7  | 426 | 659 42-6  | 476 | 677 66-0  |
| 277 | 442 43-9 | 327 | 514 52-8 | 377 | 576 34-4  | 427 | 660 43-9  | 477 | 678 51-4  |
| 278 | 444 04-8 | 328 | 516 02-1 | 378 | 577 49-8  | 428 | 661 44-8  | 478 | 679 43-9  |
| 279 | 445 04-4 | 329 | 516 53-9 | 379 | 578 64-2  | 429 | 662 45-3  | 479 | 680 33-5  |
| 280 | 447 18-6 | 330 | 518 38-9 | 380 | 579 28-6  | 430 | 663 46-8  | 480 | 681 24-2  |
| 281 | 448 26-1 | 331 | 519 22-8 | 381 | 580 28-10 | 431 | 664 47-1  | 481 | 682 14-1  |
| 282 | 450 14-9 | 332 | 521 13-1 | 382 | 582 0-4   | 432 | 665 48-2  | 482 | 683 04-0  |
| 283 | 451 28-6 | 333 | 523 44-3 | 383 | 583 19-8  | 433 | 666 48-9  | 483 | 684 04-1  |
| 284 | 453 14-1 | 334 | 525 26-6 | 384 | 584 43-3  | 434 | 667 49-2  | 484 | 685 14-3  |
| 285 | 454 14-9 | 335 | 526 0-1  | 385 | 585 46-2  | 435 | 668 49-4  | 485 | 686 24-7  |
| 286 | 456 16-0 | 336 | 526 32-1 | 386 | 586 38-3  | 436 | 669 48-8  | 486 | 686 61-6  |
| 287 | 457 38-9 | 337 | 527 62-9 | 387 | 587 21-3  | 437 | 670 48-4  | 487 | 687 31-0  |
| 288 | 459 29-5 | 338 | 528 51-6 | 388 | 588 11-7  | 438 | 671 47-4  | 488 | 688 41-8  |
| 289 | 460 29-8 | 339 | 530 02-7 | 389 | 589 21-9  | 439 | 672 46-3  | 489 | 689 30-9  |
| 290 | 462 12-6 | 340 | 532 42-9 | 390 | 591 06-4  | 440 | 673 45-2  | 490 | 690 19-1  |
| 291 | 463 29-1 | 341 | 534 28-4 | 391 | 592 12-8  | 441 | 674 43-6  | 491 | 691 08-1  |
| 292 | 465 18-9 | 342 | 536 03-1 | 392 | 593 28-6  | 442 | 675 43-1  | 492 | 691 56-1  |
| 293 | 466 38-6 | 343 | 538 29-1 | 393 | 594 19-6  | 443 | 676 40-7  | 493 | 692 54-9  |
| 294 | 468 13-1 | 344 | 540 53-4 | 394 | 595 42-6  | 444 | 677 18-10 | 494 | 693 31-0  |
| 295 | 469 31-0 | 345 | 542 19-1 | 395 | 596 29-7  | 445 | 678 16-0  | 495 | 694 60-1  |
| 296 | 471 39-2 | 346 | 543 07-1 | 396 | 597 09-8  | 446 | 679 13-12 | 496 | 695 48-7  |
| 297 | 473 23-4 | 347 | 545 29-3 | 397 | 598 29-5  | 447 | 680 30-5  | 497 | 696 31-4  |
| 298 | 474 16-1 | 348 | 547 51-1 | 398 | 599 28-1  | 448 | 681 27-8  | 498 | 697 33-9  |
| 299 | 475 37-1 | 349 | 548 33-4 | 399 | 600 27-4  | 449 | 682 14-6  | 499 | 698 00-3  |
| 300 | 477 44-1 | 350 | 549 06-0 | 400 | 601 00-0  | 450 | 683 21-3  | 500 | 699 27-0  |

350 = 0° 4' 10" B. 4681 5748 T. 5734  
 360 = 0° 5' 0" 5747 5733  
 370 = 0° 5' 50" 5747 5733  
 400 = 0° 6' 40" 5746 5734  
 450 = 0° 7' 30" 5745 5736



| N.  | Log.     | N.  | Log.              | N.  | Log.          | N.  | Log.     | N.  | Log.     |
|-----|----------|-----|-------------------|-----|---------------|-----|----------|-----|----------|
| 500 | 698 9700 | 550 | 740 3627          | 600 | 778 1513      | 650 | 812 9134 | 700 | 845 0980 |
| 501 | 699 8377 | 551 | 741 1516          | 601 | 778 8745      | 651 | 813 5810 | 701 | 845 7180 |
| 502 | 700 7037 | 552 | 741 9391          | 602 | 779 5965      | 652 | 814 2476 | 702 | 846 3371 |
| 503 | 701 5680 | 553 | 742 7251          | 603 | 780 3173      | 653 | 814 9132 | 703 | 846 9553 |
| 504 | 702 4305 | 554 | 743 5098          | 604 | 781 0369      | 654 | 815 5777 | 704 | 847 5727 |
| 505 | 703 2914 | 555 | 744 2930          | 605 | 781 7554      | 655 | 816 2413 | 705 | 848 1891 |
| 506 | 704 1505 | 556 | 745 0748          | 606 | 782 4726      | 656 | 816 9038 | 706 | 848 8047 |
| 507 | 705 0080 | 557 | 745 8552          | 607 | 783 1887      | 657 | 817 5654 | 707 | 849 4194 |
| 508 | 705 8637 | 558 | 746 6342          | 608 | 783 9036      | 658 | 818 2259 | 708 | 850 0333 |
| 509 | 706 7178 | 559 | 747 4118          | 609 | 784 6173      | 659 | 818 8854 | 709 | 850 6462 |
| 510 | 707 5702 | 560 | 748 1880          | 610 | 785 3298      | 660 | 819 5439 | 710 | 851 2583 |
| 511 | 708 4209 | 561 | 748 9629          | 611 | 786 0412      | 661 | 820 2015 | 711 | 851 8696 |
| 512 | 709 2700 | 562 | 749 7363          | 612 | 786 7514      | 662 | 820 8580 | 712 | 852 4800 |
| 513 | 710 1174 | 563 | 750 5084          | 613 | 787 4605      | 663 | 821 5135 | 713 | 853 0895 |
| 514 | 710 9631 | 564 | 751 2791          | 614 | 788 1684      | 664 | 822 1681 | 714 | 853 6981 |
| 515 | 711 8072 | 565 | 752 0484          | 615 | 788 8751      | 665 | 822 8216 | 715 | 854 3060 |
| 516 | 712 6497 | 566 | 752 8164          | 616 | 789 5807      | 666 | 823 4742 | 716 | 854 9130 |
| 517 | 713 4905 | 567 | 753 5831          | 617 | 790 2852      | 667 | 824 1258 | 717 | 855 5191 |
| 518 | 714 3298 | 568 | 754 3483          | 618 | 790 9885      | 668 | 824 7705 | 718 | 856 1244 |
| 519 | 715 1674 | 569 | 755 1123          | 619 | 791 6906      | 669 | 825 4261 | 719 | 856 7289 |
| 520 | 716 0033 | 570 | 755 8749          | 620 | 792 3917      | 670 | 826 0748 | 720 | 857 3325 |
| 521 | 716 8377 | 571 | 756 6361          | 621 | 793 0916      | 671 | 826 7225 | 721 | 857 9353 |
| 522 | 717 6705 | 572 | 757 3960          | 622 | 793 7904      | 672 | 827 3693 | 722 | 858 5372 |
| 523 | 718 5017 | 573 | 758 1546          | 623 | 794 4880      | 673 | 828 0151 | 723 | 859 1383 |
| 524 | 719 3313 | 574 | 758 9119          | 624 | 795 1846      | 674 | 828 6599 | 724 | 859 7386 |
| 525 | 720 1593 | 575 | 759 6678          | 625 | 795 8800      | 675 | 829 3038 | 725 | 860 3380 |
| 526 | 720 9857 | 576 | 760 4225          | 626 | 796 5743      | 676 | 829 9467 | 726 | 860 9366 |
| 527 | 721 8106 | 577 | 761 1758          | 627 | 797 2675      | 677 | 830 5887 | 727 | 861 5344 |
| 528 | 722 6339 | 578 | 761 9278          | 628 | 797 9596      | 678 | 831 2297 | 728 | 862 1314 |
| 529 | 723 4557 | 579 | 762 6786          | 629 | 798 6506      | 679 | 831 8698 | 729 | 862 7275 |
| 530 | 724 2759 | 580 | 763 4280          | 630 | 799 3405      | 680 | 832 5089 | 730 | 863 3229 |
| 531 | 725 0945 | 581 | 764 1761          | 631 | 800 0294      | 681 | 833 1471 | 731 | 863 9174 |
| 532 | 725 9116 | 582 | 764 9230          | 632 | 800 7171      | 682 | 833 7844 | 732 | 864 5111 |
| 533 | 726 7272 | 583 | 765 6686          | 633 | 801 4037      | 683 | 834 4207 | 733 | 865 1040 |
| 534 | 727 5411 | 584 | 766 4128          | 634 | 802 0893      | 684 | 835 0561 | 734 | 865 6961 |
| 535 | 728 3538 | 585 | 767 1559          | 635 | 802 7737      | 685 | 835 6906 | 735 | 866 2873 |
| 536 | 729 1648 | 586 | 767 8976          | 636 | 803 4571      | 686 | 836 3241 | 736 | 866 8778 |
| 537 | 729 9743 | 587 | 768 6381          | 637 | 804 1394      | 687 | 836 9567 | 737 | 867 4675 |
| 538 | 730 7822 | 588 | 769 3773          | 638 | 804 8207      | 688 | 837 5884 | 738 | 868 0561 |
| 539 | 731 5888 | 589 | 770 1153          | 639 | 805 5009      | 689 | 838 2192 | 739 | 868 6441 |
| 540 | 732 3938 | 590 | 770 8520          | 640 | 806 1800      | 690 | 838 8491 | 740 | 869 2317 |
| 541 | 733 1973 | 591 | 771 5875          | 641 | 806 8580      | 691 | 839 4780 | 741 | 869 8182 |
| 542 | 733 9993 | 592 | 772 3217          | 642 | 807 5350      | 692 | 840 1061 | 742 | 870 4039 |
| 543 | 734 7998 | 593 | 773 0547          | 643 | 808 2110      | 693 | 840 7332 | 743 | 870 9888 |
| 544 | 735 5989 | 594 | 773 7864          | 644 | 808 8859      | 694 | 841 3595 | 744 | 871 5729 |
| 545 | 736 3965 | 595 | 774 5170          | 645 | 809 5597      | 695 | 841 9848 | 745 | 872 1563 |
| 546 | 737 1926 | 596 | 775 2463          | 646 | 810 2325      | 696 | 842 6092 | 746 | 872 7388 |
| 547 | 737 9873 | 597 | 775 9743          | 647 | 810 9043      | 697 | 843 2328 | 747 | 873 3206 |
| 548 | 738 7806 | 598 | 776 7012          | 648 | 811 5750      | 698 | 843 8554 | 748 | 873 9016 |
| 549 | 739 5723 | 599 | 777 4268          | 649 | 812 2447      | 699 | 844 4772 | 749 | 874 4818 |
| 550 | 740 3627 | 600 | 778 1513          | 650 | 812 9134      | 700 | 845 0980 | 750 | 875 0613 |
| N.  | Log.     | N.  | Log.              | N.  | Log.          | N.  | Log.     | N.  | Log.     |
|     |          |     | 500' = 0° 8' 20"  |     | S. 4.685 5744 |     | T. 5757  |     |          |
|     |          |     | 550' = 0° 9' 10"  |     |               |     | 5748     |     | 5759     |
|     |          |     | 600' = 0° 10' 0"  |     |               |     | 5743     |     | 5761     |
|     |          |     | 650' = 0° 10' 50" |     |               |     | 5741     |     | 5763     |
|     |          |     | 700' = 0° 11' 40" |     |               |     | 5740     |     | 5765     |



| N.  | Log.     | N.  | Log.     | N.  | Log.     | N.  | Log.     | N.   | Log.     |
|-----|----------|-----|----------|-----|----------|-----|----------|------|----------|
| 750 | 875 0913 | 800 | 903 0900 | 850 | 930 4189 | 900 | 958 3435 | 950  | 977 7336 |
| 751 | 875 0999 | 801 | 903 0935 | 851 | 930 4296 | 901 | 958 3498 | 951  | 978 1805 |
| 752 | 876 1170 | 802 | 903 1000 | 852 | 930 4396 | 902 | 958 3565 | 952  | 978 6369 |
| 753 | 876 1950 | 803 | 903 1035 | 853 | 930 4490 | 903 | 958 3628 | 953  | 979 0929 |
| 754 | 877 1713 | 804 | 903 2500 | 854 | 931 4579 | 904 | 958 3684 | 954  | 979 5484 |
| 755 | 877 0917 | 805 | 903 2959 | 855 | 931 4661 | 905 | 958 3746 | 955  | 980 0033 |
| 756 | 878 1118 | 806 | 903 3450 | 856 | 931 4748 | 906 | 958 3812 | 956  | 980 4579 |
| 757 | 879 0959 | 807 | 903 3745 | 857 | 931 4808 | 907 | 958 3873 | 957  | 980 9119 |
| 758 | 879 0694 | 808 | 903 4144 | 858 | 931 4871 | 908 | 958 3938 | 958  | 981 3655 |
| 759 | 880 1118 | 809 | 903 4645 | 859 | 931 4931 | 909 | 958 4009 | 959  | 981 8186 |
| 760 | 880 1116 | 810 | 903 4950 | 860 | 931 4984 | 910 | 959 4074 | 960  | 981 2714 |
| 761 | 881 1347 | 811 | 903 5250 | 861 | 931 5044 | 911 | 959 4145 | 961  | 981 7234 |
| 762 | 881 0850 | 812 | 903 5550 | 862 | 931 5071 | 912 | 959 4218 | 962  | 981 1754 |
| 763 | 881 1113 | 813 | 903 5805 | 863 | 931 5105 | 913 | 959 4298 | 963  | 981 6263 |
| 764 | 881 0914 | 814 | 903 6044 | 864 | 931 5177 | 914 | 959 4362 | 964  | 981 0770 |
| 765 | 881 0604 | 815 | 903 1156 | 865 | 931 5201 | 915 | 959 4411 | 965  | 981 5273 |
| 766 | 881 1118 | 816 | 903 6005 | 866 | 931 5179 | 916 | 959 4485 | 966  | 981 9771 |
| 767 | 881 1934 | 817 | 903 1111 | 867 | 931 5191 | 917 | 959 4503 | 967  | 981 4265 |
| 768 | 881 1613 | 818 | 903 1111 | 868 | 931 5197 | 918 | 959 4537 | 968  | 981 8754 |
| 769 | 881 0917 | 819 | 903 1111 | 869 | 931 5198 | 919 | 959 4555 | 969  | 981 3238 |
| 770 | 881 0917 | 820 | 903 1111 | 870 | 931 5191 | 920 | 959 4588 | 970  | 981 7717 |
| 771 | 881 0917 | 821 | 903 1111 | 871 | 931 5185 | 921 | 959 4596 | 971  | 981 2192 |
| 772 | 881 0917 | 822 | 903 1111 | 872 | 931 5185 | 922 | 959 4597 | 972  | 981 6661 |
| 773 | 881 0917 | 823 | 903 1111 | 873 | 931 5185 | 923 | 959 4597 | 973  | 981 1138 |
| 774 | 881 0917 | 824 | 903 1111 | 874 | 931 5185 | 924 | 959 4597 | 974  | 981 5605 |
| 775 | 881 0917 | 825 | 903 1111 | 875 | 931 5185 | 925 | 959 4597 | 975  | 981 0076 |
| 776 | 881 0917 | 826 | 903 1111 | 876 | 931 5185 | 926 | 959 4597 | 976  | 981 4547 |
| 777 | 881 0917 | 827 | 903 1111 | 877 | 931 5185 | 927 | 959 4597 | 977  | 981 9018 |
| 778 | 881 0917 | 828 | 903 1111 | 878 | 931 5185 | 928 | 959 4597 | 978  | 981 3489 |
| 779 | 881 0917 | 829 | 903 1111 | 879 | 931 5185 | 929 | 959 4597 | 979  | 981 7960 |
| 780 | 881 0917 | 830 | 903 1111 | 880 | 931 5185 | 930 | 959 4597 | 980  | 981 2431 |
| 781 | 881 0917 | 831 | 903 1111 | 881 | 931 5185 | 931 | 959 4597 | 981  | 981 6902 |
| 782 | 881 0917 | 832 | 903 1111 | 882 | 931 5185 | 932 | 959 4597 | 982  | 981 1373 |
| 783 | 881 0917 | 833 | 903 1111 | 883 | 931 5185 | 933 | 959 4597 | 983  | 981 5844 |
| 784 | 881 0917 | 834 | 903 1111 | 884 | 931 5185 | 934 | 959 4597 | 984  | 981 0315 |
| 785 | 881 0917 | 835 | 903 1111 | 885 | 931 5185 | 935 | 959 4597 | 985  | 981 4786 |
| 786 | 881 0917 | 836 | 903 1111 | 886 | 931 5185 | 936 | 959 4597 | 986  | 981 9257 |
| 787 | 881 0917 | 837 | 903 1111 | 887 | 931 5185 | 937 | 959 4597 | 987  | 981 3728 |
| 788 | 881 0917 | 838 | 903 1111 | 888 | 931 5185 | 938 | 959 4597 | 988  | 981 8199 |
| 789 | 881 0917 | 839 | 903 1111 | 889 | 931 5185 | 939 | 959 4597 | 989  | 981 2670 |
| 790 | 881 0917 | 840 | 903 1111 | 890 | 931 5185 | 940 | 959 4597 | 990  | 981 7141 |
| 791 | 881 0917 | 841 | 903 1111 | 891 | 931 5185 | 941 | 959 4597 | 991  | 981 1612 |
| 792 | 881 0917 | 842 | 903 1111 | 892 | 931 5185 | 942 | 959 4597 | 992  | 981 6083 |
| 793 | 881 0917 | 843 | 903 1111 | 893 | 931 5185 | 943 | 959 4597 | 993  | 981 0554 |
| 794 | 881 0917 | 844 | 903 1111 | 894 | 931 5185 | 944 | 959 4597 | 994  | 981 5025 |
| 795 | 881 0917 | 845 | 903 1111 | 895 | 931 5185 | 945 | 959 4597 | 995  | 981 9496 |
| 796 | 881 0917 | 846 | 903 1111 | 896 | 931 5185 | 946 | 959 4597 | 996  | 981 3967 |
| 797 | 881 0917 | 847 | 903 1111 | 897 | 931 5185 | 947 | 959 4597 | 997  | 981 8438 |
| 798 | 881 0917 | 848 | 903 1111 | 898 | 931 5185 | 948 | 959 4597 | 998  | 981 2909 |
| 799 | 881 0917 | 849 | 903 1111 | 899 | 931 5185 | 949 | 959 4597 | 999  | 981 7380 |
| 800 | 881 0917 | 850 | 931 4189 | 900 | 958 3435 | 950 | 977 7336 | 1000 | 981 1855 |

| N.  | Log.     | N.  | Log.     | N.  | Log.     | N.  | Log.     | N.   | Log.     |
|-----|----------|-----|----------|-----|----------|-----|----------|------|----------|
| 750 | 875 0913 | 800 | 903 0900 | 850 | 930 4189 | 900 | 958 3435 | 950  | 977 7336 |
| 751 | 875 0999 | 801 | 903 0935 | 851 | 930 4296 | 901 | 958 3498 | 951  | 978 1805 |
| 752 | 876 1170 | 802 | 903 1000 | 852 | 930 4396 | 902 | 958 3565 | 952  | 978 6369 |
| 753 | 876 1950 | 803 | 903 1035 | 853 | 930 4490 | 903 | 958 3628 | 953  | 979 0929 |
| 754 | 877 1713 | 804 | 903 2500 | 854 | 931 4579 | 904 | 958 3684 | 954  | 979 5484 |
| 755 | 877 0917 | 805 | 903 2959 | 855 | 931 4661 | 905 | 958 3746 | 955  | 980 0033 |
| 756 | 878 1118 | 806 | 903 3450 | 856 | 931 4748 | 906 | 958 3812 | 956  | 980 4579 |
| 757 | 879 0959 | 807 | 903 3745 | 857 | 931 4808 | 907 | 958 3873 | 957  | 980 9119 |
| 758 | 879 0694 | 808 | 903 4144 | 858 | 931 4871 | 908 | 958 3938 | 958  | 981 3655 |
| 759 | 880 1118 | 809 | 903 4645 | 859 | 931 4931 | 909 | 958 4009 | 959  | 981 8186 |
| 760 | 880 1116 | 810 | 903 4950 | 860 | 931 4984 | 910 | 959 4074 | 960  | 981 2714 |
| 761 | 881 1347 | 811 | 903 5250 | 861 | 931 5044 | 911 | 959 4145 | 961  | 981 7234 |
| 762 | 881 0850 | 812 | 903 5550 | 862 | 931 5071 | 912 | 959 4218 | 962  | 981 1754 |
| 763 | 881 1113 | 813 | 903 5805 | 863 | 931 5105 | 913 | 959 4298 | 963  | 981 6263 |
| 764 | 881 0914 | 814 | 903 6044 | 864 | 931 5177 | 914 | 959 4362 | 964  | 981 0770 |
| 765 | 881 0604 | 815 | 903 1156 | 865 | 931 5201 | 915 | 959 4411 | 965  | 981 5273 |
| 766 | 881 1118 | 816 | 903 6005 | 866 | 931 5179 | 916 | 959 4485 | 966  | 981 9771 |
| 767 | 881 1934 | 817 | 903 1111 | 867 | 931 5191 | 917 | 959 4503 | 967  | 981 4265 |
| 768 | 881 1613 | 818 | 903 1111 | 868 | 931 5197 | 918 | 959 4537 | 968  | 981 8754 |
| 769 | 881 0917 | 819 | 903 1111 | 869 | 931 5198 | 919 | 959 4555 | 969  | 981 3238 |
| 770 | 881 0917 | 820 | 903 1111 | 870 | 931 5191 | 920 | 959 4588 | 970  | 981 7717 |
| 771 | 881 0917 | 821 | 903 1111 | 871 | 931 5185 | 921 | 959 4596 | 971  | 981 2192 |
| 772 | 881 0917 | 822 | 903 1111 | 872 | 931 5185 | 922 | 959 4597 | 972  | 981 6661 |
| 773 | 881 0917 | 823 | 903 1111 | 873 | 931 5185 | 923 | 959 4597 | 973  | 981 1138 |
| 774 | 881 0917 | 824 | 903 1111 | 874 | 931 5185 | 924 | 959 4597 | 974  | 981 5605 |
| 775 | 881 0917 | 825 | 903 1111 | 875 | 931 5185 | 925 | 959 4597 | 975  | 981 0076 |
| 776 | 881 0917 | 826 | 903 1111 | 876 | 931 5185 | 926 | 959 4597 | 976  | 981 4547 |
| 777 | 881 0917 | 827 | 903 1111 | 877 | 931 5185 | 927 | 959 4597 | 977  | 981 9018 |
| 778 | 881 0917 | 828 | 903 1111 | 878 | 931 5185 | 928 | 959 4597 | 978  | 981 3489 |
| 779 | 881 0917 | 829 | 903 1111 | 879 | 931 5185 | 929 | 959 4597 | 979  | 981 7960 |
| 780 | 881 0917 | 830 | 903 1111 | 880 | 931 5185 | 930 | 959 4597 | 980  | 981 2431 |
| 781 | 881 0917 | 831 | 903 1111 | 881 | 931 5185 | 931 | 959 4597 | 981  | 981 6902 |
| 782 | 881 0917 | 832 | 903 1111 | 882 | 931 5185 | 932 | 959 4597 | 982  | 981 1373 |
| 783 | 881 0917 | 833 | 903 1111 | 883 | 931 5185 | 933 | 959 4597 | 983  | 981 5844 |
| 784 | 881 0917 | 834 | 903 1111 | 884 | 931 5185 | 934 | 959 4597 | 984  | 981 0315 |
| 785 | 881 0917 | 835 | 903 1111 | 885 | 931 5185 | 935 | 959 4597 | 985  | 981 4786 |
| 786 | 881 0917 | 836 | 903 1111 | 886 | 931 5185 | 936 | 959 4597 | 986  | 981 9257 |
| 787 | 881 0917 | 837 | 903 1111 | 887 | 931 5185 | 937 | 959 4597 | 987  | 981 3728 |
| 788 | 881 0917 | 838 | 903 1111 | 888 | 931 5185 | 938 | 959 4597 | 988  | 981 8199 |
| 789 | 881 0917 | 839 | 903 1111 | 889 | 931 5185 | 939 | 959 4597 | 989  | 981 2670 |
| 790 | 881 0917 | 840 | 903 1111 | 890 | 931 5185 | 940 | 959 4597 | 990  | 981 7141 |
| 791 | 881 0917 | 841 | 903 1111 | 891 | 931 5185 | 941 | 959 4597 | 991  | 981 1612 |
| 792 | 881 0917 | 842 | 903 1111 | 892 | 931 5185 | 942 | 959 4597 | 992  | 981 6083 |
| 793 | 881 0917 | 843 | 903 1111 | 893 | 931 5185 | 943 | 959 4597 | 993  | 981 0554 |
| 794 | 881 0917 | 844 | 903 1111 | 894 | 931 5185 | 944 | 959 4597 | 994  | 981 5025 |
| 795 | 881 0917 | 845 | 903 1111 | 895 | 931 5185 | 945 | 959 4597 | 995  | 981 9496 |
| 796 | 881 0917 | 846 | 903 1111 | 896 | 931 5185 | 946 | 959 4597 | 996  | 981 3967 |
| 797 | 881 0917 | 847 | 903 1111 | 897 | 931 5185 | 947 | 959 4597 | 997  | 981 8438 |
| 798 | 881 0917 | 848 | 903 1111 | 898 | 931 5185 | 948 | 959 4597 | 998  | 981 2909 |
| 799 | 881 0917 | 849 | 903 1111 | 899 | 931 5185 | 949 | 959 4597 | 999  | 981 7380 |
| 800 | 881 0917 | 850 | 931 4189 | 900 | 958 3435 | 950 | 977 7336 | 1000 | 981 1855 |

750' = 0 11 10' E 4.655 5719 T. 5768  
 800 = 0 11 30 5718 5770  
 850 = 0 11 10 5717 5771  
 900 = 0 11 0 5716 5772  
 950 = 0 11 0 5715 5773



| N.   | 0        | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | P. P.   |
|------|----------|------|------|------|------|------|------|------|------|------|---------|
| 1000 | 000 0000 | 0434 | 0869 | 1303 | 1737 | 2171 | 2605 | 3039 | 3473 | 3907 | 435 434 |
| 01   | 4341     | 4775 | 5208 | 5642 | 6076 | 6510 | 6943 | 7377 | 7810 | 8244 | 435 434 |
| 02   | 8677     | 9111 | 9544 | 9977 | 0411 | 0844 | 1277 | 1710 | 2143 | 2576 | 435 434 |
| 03   | 001 3009 | 3442 | 3875 | 4308 | 4741 | 5174 | 5607 | 6039 | 6472 | 6905 | 435 434 |
| 04   | 7337     | 7770 | 8202 | 8635 | 9067 | 9499 | 9932 | 0364 | 0796 | 1228 | 435 434 |
| 05   | 002 1661 | 2093 | 2525 | 2957 | 3389 | 3821 | 4253 | 4685 | 5116 | 5548 | 435 434 |
| 06   | 5980     | 6411 | 6843 | 7275 | 7706 | 8138 | 8569 | 9001 | 9432 | 9863 | 435 434 |
| 07   | 003 0205 | 0726 | 1157 | 1588 | 2019 | 2451 | 2882 | 3313 | 3744 | 4174 | 435 434 |
| 08   | 4605     | 5036 | 5467 | 5898 | 6328 | 6759 | 7190 | 7620 | 8051 | 8481 | 435 434 |
| 09   | 8912     | 9342 | 9772 | 0203 | 0633 | 1063 | 1493 | 1924 | 2354 | 2784 | 435 434 |
| 1010 | 004 3214 | 3644 | 4074 | 4504 | 4933 | 5363 | 5793 | 6223 | 6652 | 7082 | 435 434 |
| 11   | 7512     | 7941 | 8371 | 8800 | 9229 | 9659 | 0088 | 0517 | 0947 | 1376 | 435 434 |
| 12   | 005 1805 | 2234 | 2663 | 3092 | 3521 | 3950 | 4379 | 4808 | 5237 | 5666 | 435 434 |
| 13   | 6094     | 6523 | 6952 | 7380 | 7809 | 8238 | 8666 | 9094 | 9523 | 9951 | 435 434 |
| 14   | 006 0180 | 0608 | 1036 | 1464 | 1892 | 2320 | 2748 | 3176 | 3604 | 4032 | 435 434 |
| 15   | 4660     | 5088 | 5516 | 5944 | 6372 | 6799 | 7227 | 7655 | 8082 | 8510 | 435 434 |
| 16   | 8937     | 9365 | 9792 | 0220 | 0647 | 1074 | 1501 | 1928 | 2355 | 2782 | 435 434 |
| 17   | 007 3210 | 3637 | 4064 | 4490 | 4917 | 5344 | 5771 | 6198 | 6624 | 7051 | 435 434 |
| 18   | 7438     | 7864 | 8291 | 8717 | 9143 | 9569 | 0000 | 0426 | 0852 | 1278 | 435 434 |
| 19   | 008 1742 | 2168 | 2594 | 3020 | 3446 | 3872 | 4298 | 4724 | 5150 | 5576 | 435 434 |
| 1020 | 6002     | 6427 | 6853 | 7279 | 7704 | 8130 | 8556 | 8981 | 9407 | 9832 | 435 434 |
| 21   | 009 0257 | 0683 | 1108 | 1533 | 1959 | 2384 | 2809 | 3234 | 3659 | 4084 | 435 434 |
| 22   | 4509     | 4934 | 5359 | 5784 | 6208 | 6633 | 7058 | 7483 | 7907 | 8332 | 435 434 |
| 23   | 8756     | 9181 | 9605 | 0030 | 0454 | 0878 | 1303 | 1727 | 2151 | 2575 | 435 434 |
| 24   | 010 3000 | 3424 | 3848 | 4272 | 4696 | 5120 | 5544 | 5967 | 6391 | 6815 | 435 434 |
| 25   | 7439     | 7862 | 8286 | 8710 | 9133 | 9557 | 0000 | 0424 | 0847 | 1270 | 435 434 |
| 26   | 011 1807 | 2230 | 2653 | 3076 | 3499 | 3922 | 4345 | 4768 | 5191 | 5614 | 435 434 |
| 27   | 5704     | 6127 | 6550 | 6973 | 7396 | 7818 | 8241 | 8664 | 9086 | 9509 | 435 434 |
| 28   | 9931     | 0354 | 0776 | 1198 | 1621 | 2043 | 2465 | 2887 | 3310 | 3732 | 435 434 |
| 29   | 012 4154 | 4576 | 4998 | 5420 | 5842 | 6264 | 6685 | 7107 | 7529 | 7951 | 435 434 |
| 1030 | 8372     | 8794 | 9215 | 9637 | 0059 | 0480 | 0901 | 1323 | 1744 | 2165 | 435 434 |
| 31   | 013 2587 | 3008 | 3429 | 3850 | 4271 | 4692 | 5113 | 5534 | 5955 | 6376 | 435 434 |
| 32   | 6797     | 7218 | 7639 | 8059 | 8480 | 8901 | 9321 | 9742 | 0162 | 0583 | 435 434 |
| 33   | 014 1003 | 1424 | 1844 | 2264 | 2685 | 3105 | 3525 | 3945 | 4365 | 4785 | 435 434 |
| 34   | 5205     | 5625 | 6045 | 6465 | 6885 | 7305 | 7725 | 8144 | 8564 | 8984 | 435 434 |
| 35   | 9403     | 9823 | 0243 | 0662 | 1082 | 1501 | 1920 | 2340 | 2759 | 3178 | 435 434 |
| 36   | 015 3598 | 4017 | 4436 | 4855 | 5274 | 5693 | 6112 | 6531 | 6950 | 7369 | 435 434 |
| 37   | 7788     | 8206 | 8625 | 9044 | 9462 | 9881 | 0300 | 0718 | 1137 | 1555 | 435 434 |
| 38   | 2392     | 2810 | 3229 | 3647 | 4065 | 4483 | 4901 | 5319 | 5737 | 6155 | 435 434 |
| 39   | 6155     | 6573 | 6991 | 7409 | 7827 | 8245 | 8663 | 9080 | 9498 | 9916 | 435 434 |
| 1040 | 017 0333 | 0751 | 1168 | 1586 | 2003 | 2421 | 2838 | 3256 | 3673 | 4090 | 435 434 |
| 41   | 4507     | 4924 | 5342 | 5759 | 6176 | 6593 | 7010 | 7427 | 7844 | 8260 | 435 434 |
| 42   | 8677     | 9094 | 9511 | 9927 | 0344 | 0761 | 1177 | 1594 | 2010 | 2427 | 435 434 |
| 43   | 018 2843 | 3259 | 3676 | 4092 | 4508 | 4925 | 5341 | 5757 | 6173 | 6589 | 435 434 |
| 44   | 7005     | 7421 | 7837 | 8253 | 8669 | 9084 | 9500 | 9916 | 0332 | 0747 | 435 434 |
| 45   | 019 1163 | 1578 | 1994 | 2410 | 2825 | 3240 | 3656 | 4071 | 4486 | 4902 | 435 434 |
| 46   | 5317     | 5732 | 6147 | 6562 | 6977 | 7392 | 7807 | 8222 | 8637 | 9052 | 435 434 |
| 47   | 9467     | 9882 | 0296 | 0711 | 1126 | 1540 | 1955 | 2369 | 2784 | 3198 | 435 434 |
| 48   | 020 3613 | 4027 | 4442 | 4856 | 5270 | 5684 | 6099 | 6513 | 6927 | 7341 | 435 434 |
| 49   | 7755     | 8169 | 8583 | 8997 | 9411 | 9824 | 0238 | 0652 | 1066 | 1479 | 435 434 |
| 1050 | 021 1891 | 2307 | 2720 | 3134 | 3547 | 3961 | 4374 | 4787 | 5201 | 5614 | 435 434 |



| N.   | 0        | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | P. P.       |
|------|----------|------|------|------|------|------|------|------|------|------|-------------|
| 1050 | 021 1891 | 2397 | 2720 | 3174 | 3547 | 3961 | 4374 | 4787 | 5200 | 5614 | 414 413 412 |
| 51   | 0027     | 6130 | 6854 | 7467 | 7980 | 8493 | 8906 | 9319 | 9732 | 0245 | 414 413 412 |
| 52   | 021 1892 | 0570 | 0983 | 1396 | 1808 | 2221 | 2634 | 3047 | 3459 | 3872 | 414 413 412 |
| 53   | 0481     | 0894 | 1307 | 1720 | 2133 | 2546 | 2958 | 3371 | 3784 | 4193 | 414 413 412 |
| 54   | 0750     | 1163 | 1576 | 1989 | 2402 | 2815 | 3228 | 3641 | 4054 | 4467 | 414 413 412 |
| 55   | 021 1893 | 0570 | 0983 | 1396 | 1808 | 2221 | 2634 | 3047 | 3459 | 3872 | 414 413 412 |
| 56   | 0849     | 1262 | 1675 | 2088 | 2501 | 2914 | 3327 | 3740 | 4153 | 4566 | 414 413 412 |
| 57   | 034 1894 | 0757 | 1170 | 1583 | 1996 | 2409 | 2822 | 3235 | 3648 | 4061 | 414 413 412 |
| 58   | 0857     | 1270 | 1683 | 2096 | 2509 | 2922 | 3335 | 3748 | 4161 | 4574 | 414 413 412 |
| 59   | 0060     | 0473 | 0886 | 1299 | 1712 | 2125 | 2538 | 2951 | 3364 | 3777 | 414 413 412 |
| 1060 | 025 1099 | 0718 | 1177 | 1636 | 2095 | 2554 | 3013 | 3472 | 3931 | 4390 | 414 413 412 |
| 61   | 0733     | 1192 | 1651 | 2110 | 2569 | 3028 | 3487 | 3946 | 4405 | 4864 | 414 413 412 |
| 62   | 026 1100 | 0719 | 1178 | 1637 | 2096 | 2555 | 3014 | 3473 | 3932 | 4391 | 414 413 412 |
| 63   | 0833     | 1292 | 1751 | 2210 | 2669 | 3128 | 3587 | 4046 | 4505 | 4964 | 414 413 412 |
| 64   | 0116     | 0575 | 1034 | 1493 | 1952 | 2411 | 2870 | 3329 | 3788 | 4247 | 414 413 412 |
| 65   | 027 1101 | 0736 | 1195 | 1654 | 2113 | 2572 | 3031 | 3490 | 3949 | 4408 | 414 413 412 |
| 66   | 0854     | 1313 | 1772 | 2231 | 2690 | 3149 | 3608 | 4067 | 4526 | 4985 | 414 413 412 |
| 67   | 038 1102 | 0841 | 1300 | 1759 | 2218 | 2677 | 3136 | 3595 | 4054 | 4513 | 414 413 412 |
| 68   | 0911     | 1370 | 1829 | 2288 | 2747 | 3206 | 3665 | 4124 | 4583 | 4942 | 414 413 412 |
| 69   | 0177     | 0636 | 1095 | 1554 | 2013 | 2472 | 2931 | 3390 | 3849 | 4308 | 414 413 412 |
| 1070 | 029 1103 | 0841 | 1300 | 1759 | 2218 | 2677 | 3136 | 3595 | 4054 | 4513 | 414 413 412 |
| 71   | 0925     | 1384 | 1843 | 2302 | 2761 | 3220 | 3679 | 4138 | 4597 | 4956 | 414 413 412 |
| 72   | 040 1104 | 0841 | 1300 | 1759 | 2218 | 2677 | 3136 | 3595 | 4054 | 4513 | 414 413 412 |
| 73   | 0977     | 1436 | 1895 | 2354 | 2813 | 3272 | 3731 | 4190 | 4649 | 4908 | 414 413 412 |
| 74   | 041 1105 | 0841 | 1300 | 1759 | 2218 | 2677 | 3136 | 3595 | 4054 | 4513 | 414 413 412 |
| 75   | 0985     | 1444 | 1903 | 2362 | 2821 | 3280 | 3739 | 4198 | 4657 | 4916 | 414 413 412 |
| 76   | 0831     | 1286 | 1745 | 2204 | 2663 | 3122 | 3581 | 4040 | 4499 | 4858 | 414 413 412 |
| 77   | 042 1106 | 0841 | 1300 | 1759 | 2218 | 2677 | 3136 | 3595 | 4054 | 4513 | 414 413 412 |
| 78   | 0993     | 1452 | 1911 | 2370 | 2829 | 3288 | 3747 | 4206 | 4665 | 4924 | 414 413 412 |
| 79   | 043 1107 | 0841 | 1300 | 1759 | 2218 | 2677 | 3136 | 3595 | 4054 | 4513 | 414 413 412 |
| 1080 | 044 1108 | 0841 | 1300 | 1759 | 2218 | 2677 | 3136 | 3595 | 4054 | 4513 | 414 413 412 |
| 81   | 0997     | 1460 | 1919 | 2378 | 2837 | 3296 | 3755 | 4214 | 4673 | 4932 | 414 413 412 |
| 82   | 045 1109 | 0841 | 1300 | 1759 | 2218 | 2677 | 3136 | 3595 | 4054 | 4513 | 414 413 412 |
| 83   | 1005     | 1468 | 1927 | 2386 | 2845 | 3304 | 3763 | 4222 | 4681 | 4940 | 414 413 412 |
| 84   | 046 1110 | 0841 | 1300 | 1759 | 2218 | 2677 | 3136 | 3595 | 4054 | 4513 | 414 413 412 |
| 85   | 1013     | 1476 | 1935 | 2394 | 2853 | 3312 | 3771 | 4230 | 4689 | 4948 | 414 413 412 |
| 86   | 047 1111 | 0841 | 1300 | 1759 | 2218 | 2677 | 3136 | 3595 | 4054 | 4513 | 414 413 412 |
| 87   | 1021     | 1484 | 1943 | 2402 | 2861 | 3320 | 3779 | 4238 | 4697 | 4956 | 414 413 412 |
| 88   | 048 1112 | 0841 | 1300 | 1759 | 2218 | 2677 | 3136 | 3595 | 4054 | 4513 | 414 413 412 |
| 89   | 1029     | 1492 | 1951 | 2410 | 2869 | 3328 | 3787 | 4246 | 4705 | 4964 | 414 413 412 |
| 1090 | 049 1113 | 0841 | 1300 | 1759 | 2218 | 2677 | 3136 | 3595 | 4054 | 4513 | 414 413 412 |
| 91   | 1037     | 1500 | 1959 | 2418 | 2877 | 3336 | 3795 | 4254 | 4713 | 4972 | 414 413 412 |
| 92   | 050 1114 | 0841 | 1300 | 1759 | 2218 | 2677 | 3136 | 3595 | 4054 | 4513 | 414 413 412 |
| 93   | 1045     | 1508 | 1967 | 2426 | 2885 | 3344 | 3803 | 4262 | 4721 | 4980 | 414 413 412 |
| 94   | 051 1115 | 0841 | 1300 | 1759 | 2218 | 2677 | 3136 | 3595 | 4054 | 4513 | 414 413 412 |
| 95   | 1053     | 1516 | 1975 | 2434 | 2893 | 3352 | 3811 | 4270 | 4729 | 4988 | 414 413 412 |
| 96   | 052 1116 | 0841 | 1300 | 1759 | 2218 | 2677 | 3136 | 3595 | 4054 | 4513 | 414 413 412 |
| 97   | 1061     | 1524 | 1983 | 2442 | 2901 | 3360 | 3819 | 4278 | 4737 | 4996 | 414 413 412 |
| 98   | 053 1117 | 0841 | 1300 | 1759 | 2218 | 2677 | 3136 | 3595 | 4054 | 4513 | 414 413 412 |
| 99   | 1069     | 1532 | 1991 | 2450 | 2909 | 3368 | 3827 | 4286 | 4745 | 5004 | 414 413 412 |
| 1100 | 054 1118 | 0841 | 1300 | 1759 | 2218 | 2677 | 3136 | 3595 | 4054 | 4513 | 414 413 412 |

| N.   | 0        | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | P. P.       |
|------|----------|------|------|------|------|------|------|------|------|------|-------------|
| 1050 | 021 1891 | 2397 | 2720 | 3174 | 3547 | 3961 | 4374 | 4787 | 5200 | 5614 | 414 413 412 |
| 1060 | 025 1099 | 0718 | 1177 | 1636 | 2095 | 2554 | 3013 | 3472 | 3931 | 4390 | 414 413 412 |
| 1070 | 029 1103 | 0841 | 1300 | 1759 | 2218 | 2677 | 3136 | 3595 | 4054 | 4513 | 414 413 412 |
| 1080 | 044 1108 | 0841 | 1300 | 1759 | 2218 | 2677 | 3136 | 3595 | 4054 | 4513 | 414 413 412 |
| 1090 | 049 1113 | 0841 | 1300 | 1759 | 2218 | 2677 | 3136 | 3595 | 4054 | 4513 | 414 413 412 |
| 1100 | 054 1118 | 0841 | 1300 | 1759 | 2218 | 2677 | 3136 | 3595 | 4054 | 4513 | 414 413 412 |



| N.   | 0        | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     | P. P.               |
|------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------------------|
| 1100 | c41 3927 | 4322  | 4716  | 5111  | 5506  | 5900  | 6295  | 6690  | 7084  | 7479  | 395 304 303         |
| 01   | 7873     | 8268  | 8662  | 9056  | 9451  | 9845  | 10239 | 10633 | 11028 | 11422 | 1 39.5 39.4 39.3    |
| 02   | c42 1816 | 2210  | 2604  | 2998  | 3392  | 3786  | 4180  | 4574  | 4968  | 5361  | 2 118.5 118.2 117.9 |
| 03   | 5755     | 6149  | 6543  | 6937  | 7331  | 7724  | 8117  | 8510  | 8904  | 9297  | 3 158.0 157.6 157.2 |
| 04   | 9691     | 10084 | 10477 | 10871 | 11264 | 11657 | 12050 | 12444 | 12837 | 13230 | 4 197.5 197.0 196.5 |
| 05   | c43 3623 | 4016  | 4409  | 4802  | 5195  | 5587  | 5980  | 6373  | 6766  | 7159  | 5 237.0 236.4 235.8 |
| 06   | 7551     | 7944  | 8337  | 8729  | 9122  | 9514  | 9907  | 10299 | 10692 | 11084 | 6 276.5 275.8 275.1 |
| 07   | c44 1476 | 1869  | 2261  | 2653  | 3045  | 3437  | 3829  | 4222  | 4614  | 5006  | 7 316.0 315.2 314.4 |
| 08   | 5398     | 5790  | 6181  | 6573  | 6965  | 7357  | 7749  | 8140  | 8532  | 8924  | 8 355.5 354.6 353.7 |
| 09   | 9315     | 9707  | 10099 | 10490 | 10882 | 11273 | 11664 | 12056 | 12447 | 12839 | 9 392.2 391.3 390.4 |
| 1110 | c45 3230 | 3621  | 4012  | 4403  | 4795  | 5186  | 5577  | 5968  | 6359  | 6750  | 1 39.2 39.1 39.0    |
| 11   | 7141     | 7531  | 7922  | 8313  | 8704  | 9095  | 9485  | 9876  | 10267 | 10657 | 2 78.4 78.2 78.0    |
| 12   | c46 1028 | 1418  | 1809  | 2199  | 2590  | 2980  | 3371  | 3761  | 4151  | 4541  | 3 117.6 117.3 117.0 |
| 13   | 4954     | 5342  | 5732  | 6122  | 6512  | 6902  | 7292  | 7682  | 8072  | 8462  | 4 156.8 156.4 156.0 |
| 14   | 8852     | 9242  | 9632  | 10021 | 10411 | 10801 | 11190 | 11580 | 11970 | 12359 | 5 195.0 194.5 194.0 |
| 15   | c47 2749 | 3138  | 3528  | 3917  | 4306  | 4696  | 5085  | 5474  | 5864  | 6253  | 6 234.4 233.6 232.8 |
| 16   | 6642     | 7031  | 7420  | 7809  | 8198  | 8587  | 8976  | 9365  | 9754  | 10143 | 7 273.7 272.7 271.8 |
| 17   | c48 5332 | 5721  | 6110  | 6498  | 6887  | 7275  | 7664  | 8052  | 8441  | 8830  | 8 313.6 312.8 311.9 |
| 18   | 4418     | 4806  | 5195  | 5583  | 5971  | 6360  | 6748  | 7136  | 7525  | 7913  | 9 352.8 351.9 351.0 |
| 19   | 8301     | 8689  | 9077  | 9465  | 9853  | 10241 | 10629 | 11017 | 11405 | 11793 | 1 38.9 38.8 38.7    |
| 1120 | c49 2180 | 2568  | 2956  | 3343  | 3731  | 4119  | 4506  | 4894  | 5281  | 5669  | 2 77.8 77.6 77.4    |
| 21   | 6056     | 6444  | 6831  | 7218  | 7606  | 7993  | 8380  | 8767  | 9154  | 9541  | 3 116.7 116.4 116.1 |
| 22   | 9925     | 10316 | 10707 | 11098 | 11489 | 11880 | 12270 | 12661 | 13052 | 13441 | 4 154.8 154.4 154.0 |
| 23   | c50 3798 | 4184  | 4571  | 4958  | 5344  | 5731  | 6117  | 6504  | 6890  | 7277  | 5 193.5 192.9 192.5 |
| 24   | 7663     | 8049  | 8436  | 8822  | 9208  | 9595  | 9981  | 10367 | 10753 | 11139 | 6 232.2 231.6 231.0 |
| 25   | c51 1525 | 1912  | 2297  | 2683  | 3069  | 3455  | 3841  | 4227  | 4612  | 4998  | 7 270.9 270.2 269.5 |
| 26   | 5384     | 5770  | 6155  | 6541  | 6926  | 7312  | 7697  | 8083  | 8468  | 8854  | 8 309.6 308.8 308.0 |
| 27   | 9239     | 9620  | 10001 | 10382 | 10763 | 11144 | 11525 | 11906 | 12287 | 12668 | 9 348.3 347.4 346.5 |
| 28   | c52 3091 | 3476  | 3861  | 4246  | 4631  | 5016  | 5401  | 5785  | 6170  | 6555  | 1 38.4 38.3 38.2    |
| 29   | 6939     | 7324  | 7709  | 8093  | 8478  | 8862  | 9247  | 9631  | 10016 | 10400 | 2 76.8 76.6 76.4    |
| 1130 | c53 5784 | 6169  | 6553  | 6937  | 7321  | 7706  | 8090  | 8474  | 8858  | 9242  | 3 115.2 114         |

| N. | 0                  | 1                 | 2                  | 3                  | 4                  | 5                  | 6                  | 7                  | 8                  | 9                 | P. P.  |
|----|--------------------|-------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|-------------------|--|
|    | 11000' = 3° 3' 40" | 11100' = 3° 5' 0" | 11200' = 3° 6' 40" | 11300' = 3° 8' 20" | 11400' = 3° 10' 0" | 1100' = 0° 18' 20" | 1110' = 0° 18' 30" | 1120' = 0° 18' 40" | 1130' = 0° 18' 50" | 1140' = 0° 19' 0" | 8.4.685 5728 T. 5790<br>5728 5791<br>5727 5791<br>5727 5792<br>5727 5793 |



| N.   | 0        | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     | P. P. |     |     |
|------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----|-----|
| 1150 | 66 06 28 | 74 56 | 77 44 | 81 11 | 84 89 | 88 66 | 92 44 | 96 11 | 99 99 | 61 76 | 378   | 377 | 376 |
| 51   | 66 07 51 | 74 57 | 77 45 | 81 12 | 84 90 | 88 67 | 92 45 | 96 12 | 99 99 | 61 77 | 378   | 377 | 376 |
| 52   | 66 09 14 | 74 58 | 77 46 | 81 13 | 84 91 | 88 68 | 92 46 | 96 13 | 99 99 | 61 78 | 378   | 377 | 376 |
| 53   | 66 10 37 | 74 59 | 77 47 | 81 14 | 84 92 | 88 69 | 92 47 | 96 14 | 99 99 | 61 79 | 378   | 377 | 376 |
| 54   | 66 12 00 | 74 60 | 77 48 | 81 15 | 84 93 | 88 70 | 92 48 | 96 15 | 99 99 | 61 80 | 378   | 377 | 376 |
| 55   | 66 13 23 | 74 61 | 77 49 | 81 16 | 84 94 | 88 71 | 92 49 | 96 16 | 99 99 | 61 81 | 378   | 377 | 376 |
| 56   | 66 14 46 | 74 62 | 77 50 | 81 17 | 84 95 | 88 72 | 92 50 | 96 17 | 99 99 | 61 82 | 378   | 377 | 376 |
| 57   | 66 16 09 | 74 63 | 77 51 | 81 18 | 84 96 | 88 73 | 92 51 | 96 18 | 99 99 | 61 83 | 378   | 377 | 376 |
| 58   | 66 17 32 | 74 64 | 77 52 | 81 19 | 84 97 | 88 74 | 92 52 | 96 19 | 99 99 | 61 84 | 378   | 377 | 376 |
| 59   | 66 18 55 | 74 65 | 77 53 | 81 20 | 84 98 | 88 75 | 92 53 | 96 20 | 99 99 | 61 85 | 378   | 377 | 376 |
| 1160 | 66 19 78 | 74 66 | 77 54 | 81 21 | 84 99 | 88 76 | 92 54 | 96 21 | 99 99 | 61 86 | 378   | 377 | 376 |
| 61   | 66 21 01 | 74 67 | 77 55 | 81 22 | 85 00 | 88 77 | 92 55 | 96 22 | 99 99 | 61 87 | 378   | 377 | 376 |
| 62   | 66 22 24 | 74 68 | 77 56 | 81 23 | 85 01 | 88 78 | 92 56 | 96 23 | 99 99 | 61 88 | 378   | 377 | 376 |
| 63   | 66 23 47 | 74 69 | 77 57 | 81 24 | 85 02 | 88 79 | 92 57 | 96 24 | 99 99 | 61 89 | 378   | 377 | 376 |
| 64   | 66 25 10 | 74 70 | 77 58 | 81 25 | 85 03 | 88 80 | 92 58 | 96 25 | 99 99 | 61 90 | 378   | 377 | 376 |
| 65   | 66 26 33 | 74 71 | 77 59 | 81 26 | 85 04 | 88 81 | 92 59 | 96 26 | 99 99 | 61 91 | 378   | 377 | 376 |
| 66   | 66 27 56 | 74 72 | 78 00 | 81 27 | 85 05 | 88 82 | 93 00 | 96 27 | 99 99 | 61 92 | 378   | 377 | 376 |
| 67   | 66 29 19 | 74 73 | 78 01 | 81 28 | 85 06 | 88 83 | 93 01 | 96 28 | 99 99 | 61 93 | 378   | 377 | 376 |
| 68   | 66 30 42 | 74 74 | 78 02 | 81 29 | 85 07 | 88 84 | 93 02 | 96 29 | 99 99 | 61 94 | 378   | 377 | 376 |
| 69   | 66 32 05 | 74 75 | 78 03 | 81 30 | 85 08 | 88 85 | 93 03 | 96 30 | 99 99 | 61 95 | 378   | 377 | 376 |
| 1170 | 66 33 28 | 74 76 | 78 04 | 81 31 | 85 09 | 88 86 | 93 04 | 96 31 | 99 99 | 61 96 | 378   | 377 | 376 |
| 71   | 66 34 51 | 74 77 | 78 05 | 81 32 | 85 10 | 88 87 | 93 05 | 96 32 | 99 99 | 61 97 | 378   | 377 | 376 |
| 72   | 66 36 14 | 74 78 | 78 06 | 81 33 | 85 11 | 88 88 | 93 06 | 96 33 | 99 99 | 61 98 | 378   | 377 | 376 |
| 73   | 66 37 37 | 74 79 | 78 07 | 81 34 | 85 12 | 88 89 | 93 07 | 96 34 | 99 99 | 61 99 | 378   | 377 | 376 |
| 74   | 66 39 00 | 74 80 | 78 08 | 81 35 | 85 13 | 88 90 | 93 08 | 96 35 | 99 99 | 62 00 | 378   | 377 | 376 |
| 75   | 66 40 23 | 74 81 | 78 09 | 81 36 | 85 14 | 88 91 | 93 09 | 96 36 | 99 99 | 62 01 | 378   | 377 | 376 |
| 76   | 66 41 46 | 74 82 | 78 10 | 81 37 | 85 15 | 88 92 | 93 10 | 96 37 | 99 99 | 62 02 | 378   | 377 | 376 |
| 77   | 66 43 09 | 74 83 | 78 11 | 81 38 | 85 16 | 88 93 | 93 11 | 96 38 | 99 99 | 62 03 | 378   | 377 | 376 |
| 78   | 66 44 32 | 74 84 | 78 12 | 81 39 | 85 17 | 88 94 | 93 12 | 96 39 | 99 99 | 62 04 | 378   | 377 | 376 |
| 79   | 66 45 55 | 74 85 | 78 13 | 81 40 | 85 18 | 88 95 | 93 13 | 96 40 | 99 99 | 62 05 | 378   | 377 | 376 |
| 1180 | 66 47 18 | 74 86 | 78 14 | 81 41 | 85 19 | 88 96 | 93 14 | 96 41 | 99 99 | 62 06 | 378   | 377 | 376 |
| 81   | 66 48 41 | 74 87 | 78 15 | 81 42 | 85 20 | 88 97 | 93 15 | 96 42 | 99 99 | 62 07 | 378   | 377 | 376 |
| 82   | 66 49 64 | 74 88 | 78 16 | 81 43 | 85 21 | 88 98 | 93 16 | 96 43 | 99 99 | 62 08 | 378   | 377 | 376 |
| 83   | 66 50 87 | 74 89 | 78 17 | 81 44 | 85 22 | 88 99 | 93 17 | 96 44 | 99 99 | 62 09 | 378   | 377 | 376 |
| 84   | 66 52 10 | 74 90 | 78 18 | 81 45 | 85 23 | 89 00 | 93 18 | 96 45 | 99 99 | 62 10 | 378   | 377 | 376 |
| 85   | 66 53 33 | 74 91 | 78 19 | 81 46 | 85 24 | 89 01 | 93 19 | 96 46 | 99 99 | 62 11 | 378   | 377 | 376 |
| 86   | 66 54 56 | 74 92 | 78 20 | 81 47 | 85 25 | 89 02 | 93 20 | 96 47 | 99 99 | 62 12 | 378   | 377 | 376 |
| 87   | 66 56 19 | 74 93 | 78 21 | 81 48 | 85 26 | 89 03 | 93 21 | 96 48 | 99 99 | 62 13 | 378   | 377 | 376 |
| 88   | 66 57 42 | 74 94 | 78 22 | 81 49 | 85 27 | 89 04 | 93 22 | 96 49 | 99 99 | 62 14 | 378   | 377 | 376 |
| 89   | 66 58 65 | 74 95 | 78 23 | 81 50 | 85 28 | 89 05 | 93 23 | 96 50 | 99 99 | 62 15 | 378   | 377 | 376 |
| 1190 | 66 59 88 | 74 96 | 78 24 | 81 51 | 85 29 | 89 06 | 93 24 | 96 51 | 99 99 | 62 16 | 378   | 377 | 376 |
| 91   | 67 01 11 | 74 97 | 78 25 | 81 52 | 85 30 | 89 07 | 93 25 | 96 52 | 99 99 | 62 17 | 378   | 377 | 376 |
| 92   | 67 02 34 | 74 98 | 78 26 | 81 53 | 85 31 | 89 08 | 93 26 | 96 53 | 99 99 | 62 18 | 378   | 377 | 376 |
| 93   | 67 03 57 | 74 99 | 78 27 | 81 54 | 85 32 | 89 09 | 93 27 | 96 54 | 99 99 | 62 19 | 378   | 377 | 376 |
| 94   | 67 05 20 | 75 00 | 78 28 | 81 55 | 85 33 | 89 10 | 93 28 | 96 55 | 99 99 | 62 20 | 378   | 377 | 376 |
| 95   | 67 06 43 | 75 01 | 78 29 | 81 56 | 85 34 | 89 11 | 93 29 | 96 56 | 99 99 | 62 21 | 378   | 377 | 376 |
| 96   | 67 07 66 | 75 02 | 78 30 | 81 57 | 85 35 | 89 12 | 93 30 | 96 57 | 99 99 | 62 22 | 378   | 377 | 376 |
| 97   | 67 08 89 | 75 03 | 78 31 | 81 58 | 85 36 | 89 13 | 93 31 | 96 58 | 99 99 | 62 23 | 378   | 377 | 376 |
| 98   | 67 10 12 | 75 04 | 78 32 | 81 59 | 85 37 | 89 14 | 93 32 | 96 59 | 99 99 | 62 24 | 378   | 377 | 376 |
| 99   | 67 11 35 | 75 05 | 78 33 | 82 00 | 85 38 | 89 15 | 93 33 | 97 00 | 99 99 | 62 25 | 378   | 377 | 376 |
| 1200 | 67 12 58 | 75 06 | 78 34 | 82 01 | 85 39 | 89 16 | 93 34 | 97 01 | 99 99 | 62 26 | 378   | 377 | 376 |

N. 0 1 2 3 4 5 6 7 8 9 P. P.

1150 66 06 28 74 56 77 44 81 11 84 89 88 66 92 44 96 11 99 99 61 76 378 377 376  
 1160 66 19 78 74 66 77 54 81 21 84 99 88 76 92 54 96 21 99 99 61 86 378 377 376  
 1170 66 33 28 74 76 78 04 81 31 85 09 88 86 93 04 96 31 99 99 61 96 378 377 376  
 1180 66 47 18 74 86 78 14 81 41 85 19 88 96 93 14 96 41 99 99 62 06 378 377 376  
 1190 66 59 88 74 96 78 24 81 51 85 29 89 06 93 24 96 51 99 99 62 16 378 377 376  
 1200 67 12 58 75 06 78 34 82 01 85 39 89 16 93 34 97 01 99 99 62 26 378 377 376



| N.   | 0        | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     | P. P.         |
|------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------------|
| 1200 | 079 1812 | 2174  | 2536  | 2898  | 3260  | 3622  | 3983  | 4345  | 4707  | 5068  | 302 301       |
| 01   | 5430     | 5792  | 6153  | 6515  | 6876  | 7238  | 7599  | 7961  | 8322  | 8683  | 1 36.2 36.1   |
| 02   | 9045     | 9406  | 9767  | 10128 | 10490 | 10851 | 11212 | 11573 | 11934 | 12295 | 2 72.4 72.2   |
| 03   | 080 2656 | 3017  | 3378  | 3739  | 4100  | 4461  | 4822  | 5183  | 5543  | 5904  | 3 108.6 108.3 |
| 04   | 6165     | 6626  | 6986  | 7347  | 7707  | 8068  | 8429  | 8789  | 9150  | 9510  | 4 144.8 144.4 |
| 05   | 9870     | 10231 | 10591 | 10952 | 11312 | 11672 | 12032 | 12393 | 12753 | 13113 | 5 181.0 180.5 |
| 06   | 081 3473 | 3833  | 4193  | 4553  | 4913  | 5273  | 5633  | 5993  | 6353  | 6713  | 6 217.2 216.6 |
| 07   | 7073     | 7432  | 7792  | 8152  | 8512  | 8871  | 9231  | 9591  | 9950  | 10310 | 7 253.4 252.7 |
| 08   | 082 0669 | 1029  | 1388  | 1748  | 2107  | 2467  | 2826  | 3185  | 3545  | 3904  | 8 289.6 288.8 |
| 09   | 4263     | 4622  | 4981  | 5341  | 5700  | 6059  | 6418  | 6777  | 7136  | 7495  | 9 325.8 324.9 |
| 1210 | 7854     | 8213  | 8571  | 8930  | 9289  | 9648  | 10007 | 10365 | 10724 | 11083 | 800 360 358   |
| 11   | 083 1441 | 1800  | 2159  | 2517  | 2876  | 3234  | 3593  | 3951  | 4309  | 4668  | 1 36.0 35.9   |
| 12   | 5026     | 5385  | 5743  | 6101  | 6459  | 6817  | 7176  | 7534  | 7892  | 8250  | 2 72.0 71.8   |
| 13   | 8608     | 8966  | 9324  | 9682  | 10040 | 10398 | 10756 | 11114 | 11471 | 11829 | 3 108.0 107.7 |
| 14   | 084 2187 | 2545  | 2902  | 3260  | 3618  | 3975  | 4333  | 4690  | 5048  | 5405  | 4 144.0 143.6 |
| 15   | 5763     | 6120  | 6478  | 6835  | 7192  | 7550  | 7907  | 8264  | 8621  | 8979  | 5 180.0 179.5 |
| 16   | 9336     | 9693  | 10050 | 10407 | 10764 | 11121 | 11478 | 11835 | 12192 | 12549 | 6 216.0 215.4 |
| 17   | 085 2906 | 3263  | 3619  | 3976  | 4333  | 4690  | 5046  | 5403  | 5760  | 6116  | 7 252.0 251.3 |
| 18   | 6473     | 6829  | 7186  | 7542  | 7899  | 8255  | 8612  | 8968  | 9324  | 9681  | 8 288.0 287.3 |
| 19   | 086 0037 | 0393  | 0750  | 1106  | 1462  | 1818  | 2174  | 2530  | 2886  | 3242  | 9 324.0 323.1 |
| 1220 | 3598     | 3954  | 4310  | 4666  | 5022  | 5378  | 5734  | 6089  | 6445  | 6801  | 357 356       |
| 21   | 7157     | 7512  | 7868  | 8224  | 8579  | 8935  | 9290  | 9646  | 10001 | 10357 | 1 35.7 35.6   |
| 22   | 087 0712 | 1067  | 1423  | 1778  | 2133  | 2489  | 2844  | 3199  | 3554  | 3909  | 2 71.4 71.2   |
| 23   | 4265     | 4620  | 4975  | 5330  | 5685  | 6040  | 6395  | 6750  | 7104  | 7459  | 3 107.0 106.8 |
| 24   | 7814     | 8169  | 8524  | 8878  | 9233  | 9588  | 9943  | 10297 | 10652 | 11006 | 4 143.0 142.6 |
| 25   | 088 1361 | 1715  | 2070  | 2424  | 2779  | 3133  | 3488  | 3842  | 4196  | 4550  | 5 178.0 177.0 |
| 26   | 4905     | 5259  | 5613  | 5967  | 6321  | 6676  | 7030  | 7384  | 7738  | 8092  | 6 214.0 213.6 |
| 27   | 8446     | 8800  | 9153  | 9507  | 9861  | 10215 | 10569 | 10923 | 11276 | 11630 | 7 250.0 249.2 |
| 28   | 089 1084 | 2337  | 2691  | 3045  | 3398  | 3752  | 4105  | 4459  | 4812  | 5165  | 8 286.0 285.1 |
| 29   | 5519     | 5872  | 6226  | 6579  | 6932  | 7285  | 7639  | 7992  | 8345  | 8698  | 9 312.0 311.3 |
| 1230 | 9051     | 9404  | 9757  | 10110 | 10463 | 10816 | 11169 | 11522 | 11875 | 12228 | 355 354       |
| 31   | 090 2581 | 2933  | 3286  | 3639  | 3991  | 4344  | 4697  | 5049  | 5402  | 5755  | 1 35.5 35.4   |
| 32   | 6107     | 6460  | 6812  | 7164  | 7517  | 7869  | 8222  | 8574  | 8926  | 9279  | 2 71.0 70.8   |
| 33   | 9631     | 9983  | 10335 | 10687 | 11039 | 11391 | 11744 | 12096 | 12448 | 12800 | 3 106.0 105.5 |
| 34   | 091 3151 | 3504  | 3855  | 4207  | 4559  | 4911  | 5263  | 5614  | 5966  | 6318  | 4 142.0 141.6 |
| 35   | 6670     | 7021  | 7373  | 7724  | 8076  | 8427  | 8779  | 9130  | 9482  | 9833  | 5 177.0 176.0 |
| 36   | 092 0183 | 0536  | 0887  | 1239  | 1590  | 1941  | 2292  | 2644  | 2995  | 3346  | 6 213.0 212.4 |
| 37   | 3697     | 4048  | 4399  | 4750  | 5101  | 5452  | 5803  | 6154  | 6505  | 6856  | 7 248.0 247.1 |
| 38   | 7206     | 7557  | 7908  | 8259  | 8609  | 8960  | 9311  | 9661  | 10012 | 10363 | 8 284.0 283.1 |
| 39   | 093 0713 | 1064  | 1414  | 1764  | 2115  | 2465  | 2816  | 3166  | 3516  | 3867  | 9 310.0 309.5 |
| 1240 | 4217     | 4567  | 4917  | 5267  | 5618  | 5968  | 6318  | 6668  | 7018  | 7368  | 353 352       |
| 41   | 7718     | 8068  | 8418  | 8768  | 9117  | 9467  | 9817  | 10167 | 10517 | 10866 | 1 35.0 34.9   |
| 42   | 094 1216 | 1566  | 1915  | 2265  | 2614  | 2964  | 3313  | 3663  | 4012  | 4362  | 2 70.0 69.8   |
| 43   | 4711     | 5061  | 5410  | 5759  | 6109  | 6458  | 6807  | 7156  | 7505  | 7855  | 3 105.0 104.7 |
| 44   | 8104     | 8553  | 8902  | 9251  | 9600  | 9949  | 10298 | 10647 | 10996 | 11345 | 4 140.0 139.6 |
| 45   | 095 1694 | 2042  | 2391  | 2740  | 3089  | 3437  | 3786  | 4135  | 4483  | 4832  | 5 175.0 174.5 |
| 46   | 5180     | 5529  | 5877  | 6226  | 6574  | 6923  | 7271  | 7620  | 7968  | 8316  | 6 210.0 209.4 |
| 47   | 8665     | 9013  | 9361  | 9709  | 10057 | 10405 | 10754 | 11102 | 11450 | 11798 | 7 245.0 244.3 |
| 48   | 096 2146 | 2494  | 2842  | 3190  | 3538  | 3885  | 4233  | 4581  | 4929  | 5277  | 8 240.0 239.2 |
| 49   | 5624     | 5972  | 6320  | 6667  | 7015  | 7363  | 7710  | 8058  | 8405  | 8753  | 9 315.0 314.1 |
| 1250 | 9100     | 9448  | 9795  | 10142 | 10490 | 10837 | 11184 | 11531 | 11879 | 12226 | 318 317       |
| 51   | 3697     | 4048  | 4399  | 4750  | 5101  | 5452  | 5803  | 6154  | 6505  | 6856  | 1 34.8 34.7   |
| 52   | 7206     | 7557  | 7908  | 8259  | 8609  | 8960  | 9311  | 9661  | 10012 | 10363 | 2 70.0 69.4   |
| 53   | 093 0713 | 1064  | 1414  | 1764  | 2115  | 2465  | 2816  | 3166  | 3516  | 3867  | 3 104.0 103.7 |
| 54   | 4217     | 4567  | 4917  | 5267  | 5618  | 5968  | 6318  | 6668  | 7018  | 7368  | 4 140.0 139.6 |
| 55   | 7718     | 8068  | 8418  | 8768  | 9117  | 9467  | 9817  | 10167 | 10517 | 10866 | 5 175.0 174.5 |
| 56   | 094 1216 | 1566  | 1915  | 2265  | 2614  | 2964  | 3313  | 3663  | 4012  | 4362  | 6 210.0 209.4 |
| 57   | 4711     | 5061  | 5410  | 5759  | 6109  | 6458  | 6807  | 7156  | 7505  | 7855  | 7 245.0 244.3 |
| 58   | 8104     | 8553  | 8902  | 9251  | 9600  | 9949  | 10298 | 10647 | 10996 | 11345 | 8 240.0 239.2 |
| 59   | 095 1694 | 2042  | 2391  | 2740  | 3089  | 3437  | 3786  | 4135  | 4483  | 4832  | 9 315.0 314.1 |
| 60   | 5180     | 5529  | 5877  | 6226  | 6574  | 6923  | 7271  | 7620  | 7968  | 8316  | 1 34.8 34.7   |
| 61   | 8665     | 9013  | 9361  | 9709  | 10057 | 10405 | 10754 | 11102 | 11450 | 11798 | 2 70.0 69.4   |
| 62   | 096 2146 | 2494  | 2842  | 3190  | 3538  | 3885  | 4233  | 4581  | 4929  | 5277  | 3 104.0 103.7 |
| 63   | 5624     | 5972  | 6320  | 6667  | 7015  | 7363  | 7710  | 8058  | 8405  | 8753  | 4 140.0 139.6 |
| 64   | 9100     | 9448  | 9795  | 10142 | 10490 | 10837 | 11184 | 11531 | 11879 | 12226 | 5 175.0 174.5 |
| 65   | 3697     | 4048  | 4399  | 4750  | 5101  | 5452  | 5803  | 6154  | 6505  | 6856  | 6 210.0 209.4 |
| 66   | 7206     | 7557  | 7908  | 8259  | 8609  | 8960  | 9311  | 9661  | 10012 | 10363 | 7 245.0 244.3 |
| 67   | 093 0713 | 1064  | 1414  | 1764  | 2115  | 2465  | 2816  | 3166  | 3516  | 3867  | 8 240.0 239.2 |
| 68   | 4217     | 4567  | 4917  | 5267  | 5618  | 5968  | 6318  | 6668  | 7018  | 7368  | 9 315.0 314.1 |
| 69   | 7718     | 8068  | 8418  | 8768  | 9117  | 9467  | 9817  | 10167 | 10517 | 10866 | 1 34.8 34.7   |
| 70   | 094 1216 | 1566  | 1915  | 2265  | 2614  | 2964  | 3313  | 3663  | 4012  | 4362  | 2 70.0 69.4   |
| 71   | 4711     | 5061  | 5410  | 5759  | 6109  | 6458  | 6807  | 7156  | 7505  | 7855  | 3 104.0 103.7 |
| 72   | 8104     | 8553  | 8902  | 9251  | 9600  | 9949  | 10298 | 10647 | 10996 | 11345 | 4 140.0 139.6 |
| 73   | 095 1694 | 2042  | 2391  | 2740  | 3089  | 3437  | 3786  | 4135  | 4483  | 4832  | 5 175.0 174.5 |
| 74   | 5180     | 5529  | 5877  | 6226  | 6574  | 6923  | 7271  | 7620  | 7968  | 8316  | 6 210.0 209.4 |
| 75   | 8665     | 9013  | 9361  | 9709  | 10057 | 10405 | 10754 | 11102 | 11450 | 11798 | 7 245.0 244.3 |
| 76   | 096 2146 | 2494  | 2842  | 3190  | 3538  | 3885  | 4233  | 4581  | 4929  | 5277  | 8 240.0 239.2 |
| 77   | 5624     | 5972  | 6320  | 6667  | 7015  | 7363  | 7710  | 8058  | 8405  | 8753  | 9 315.0 314.1 |
| 78   | 9100     | 9448  | 9795  | 10142 | 10490 | 10837 | 11184 | 11531 | 11879 | 12226 | 1 34.8 34.7   |
| 79   | 3697     | 4048  | 4399  | 4750  | 5101  | 5452  | 5803  | 6154  | 6505  | 6856  | 2 70.0 69.4   |
| 80   | 7206     | 7557  | 7908  | 8259  | 8609  | 8960  | 9311  | 9661  | 10012 | 10363 | 3 104.0 103.7 |
| 81   | 093 0713 | 1064  | 1414  | 1764  | 2115  | 2465  | 2816  | 3166  | 3516  | 3867  | 4 140.0 139.6 |
| 82   | 4217     | 4567  | 4917  | 5267  | 5618  | 5968  | 6318  | 6668  | 7018  | 7368  | 5 175.0 174.5 |
| 83   | 7718     | 8068  | 8418  | 8768  | 9117  | 9467  | 9817  | 10167 | 10517 | 10866 | 6 210.0 209.4 |
| 84   | 094 1216 | 1566  | 1915  | 2265  | 2614  | 2964  | 3313  | 3663  | 4012  | 4362  | 7 245.0 244.3 |
| 85   | 4711     | 5061  | 5410  | 5759  | 6109  | 6458  | 6807  | 7156  | 7505  | 7855  | 8 240.0 239.2 |
| 86   | 8104     | 8553  | 8902  | 9251  | 9600  | 9949  | 10298 | 10647 | 10996 | 11345 | 9 315.0 314.1 |
| 87   | 095 1694 | 2042  | 2391  | 2740  | 3089  | 3437  | 3786  | 4135  | 4483  | 4832  | 1 34.8 34.7   |
| 88   | 5180     | 5529  | 5877  | 6226  | 6574  | 6923  | 7271  | 7620  | 7968  | 8316  | 2 70.0 69.4   |
| 89   | 8665     | 9013  | 9361  | 9709  | 10057 | 10405 | 10754 | 11102 | 11450 | 11798 | 3 104.0 103.7 |
| 90   | 096 2146 | 2494  | 2842  | 3190  | 3538  | 3885  | 4233  | 4581  | 4929  | 5277  | 4 140.0 139.6 |
| 91   | 5624     | 5972  | 6320  | 6667  | 7015  | 7363  | 7710  | 8058  | 8405  | 8753  | 5 175.0 174.5 |
| 92   | 9100     | 9448  | 9795  | 10142 | 10490 | 10837 | 11184 | 11531 | 11879 | 12226 | 6 210.0 209.4 |
| 93   | 3697     | 4048  | 4399  | 4750  | 5101  | 5452  | 5803  | 6154  | 6505  | 6856  | 7 245.0 244.3 |
| 94   | 7206     | 7557  | 7908  | 8259  | 8609  | 8960  | 9311  | 9661  | 10012 | 10363 | 8 240.0 239.2 |
| 95   | 093 0713 | 1064  | 1414  | 1764  | 2115  | 2465  | 2816  | 3166  | 3516  | 3867  | 9 315.0 314.1 |
| 96   | 4217     | 4567  | 4917  | 5267  | 5618  | 5968  | 6318  | 6668  | 7018  | 7368  | 1 34.8 34.7   |
| 97   | 7718     | 8068  | 8418  | 8768  | 9117  | 9467  | 9817  | 10167 | 10517 | 10866 | 2 70.0 69.4   |
| 98   | 094 1216 | 1566  | 1915  | 2265  | 2614  | 2964  | 3313  | 3663  | 4012  | 4362  | 3 104.0 103.7 |
| 99   | 4711     | 5061  | 5410  | 5759  | 6     |       |       |       |       |       |               |







| N.   | 0        | 1    | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     | P. P. |
|------|----------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1300 | 113 9434 | 9768 | 6102  | 6436  | 6770  | 7104  | 7437  | 7771  | 8105  | 8439  | 8773  |
| 01   | 114 2773 | 3107 | 3441  | 3774  | 4108  | 4442  | 4775  | 5109  | 5443  | 5777  | 6111  |
| 02   | 6110     | 6443 | 6777  | 7110  | 7444  | 7777  | 8111  | 8445  | 8779  | 9113  | 9447  |
| 03   | 9444     | 9777 | 8111  | 8444  | 8777  | 9110  | 9444  | 9777  | 10111 | 10445 | 10779 |
| 04   | 115 2776 | 3109 | 3442  | 3775  | 4108  | 4441  | 4774  | 5108  | 5442  | 5776  | 6110  |
| 05   | 6105     | 6438 | 6771  | 7103  | 7436  | 7769  | 8102  | 8435  | 8768  | 9102  | 9435  |
| 06   | 9432     | 9765 | 8097  | 8429  | 8762  | 9095  | 9428  | 9761  | 10094 | 10428 | 10761 |
| 07   | 116 2756 | 3088 | 3420  | 3751  | 4083  | 4415  | 4747  | 5079  | 5411  | 5743  | 6075  |
| 08   | 6077     | 6409 | 6741  | 7071  | 7402  | 7732  | 8063  | 8394  | 8725  | 9056  | 9387  |
| 09   | 9396     | 9728 | 10060 | 10392 | 10724 | 11055 | 11387 | 11718 | 12049 | 12381 | 12712 |
| 1310 | 117 2713 | 3044 | 3376  | 3707  | 4039  | 4370  | 4701  | 5032  | 5363  | 5694  | 6025  |
| 11   | 6027     | 6358 | 6689  | 7021  | 7352  | 7683  | 8014  | 8345  | 8676  | 9007  | 9338  |
| 12   | 9338     | 9669 | 10000 | 10331 | 10662 | 10993 | 11324 | 11655 | 11986 | 12317 | 12648 |
| 13   | 118 2647 | 2978 | 3309  | 3639  | 3970  | 4301  | 4631  | 4962  | 5293  | 5624  | 5955  |
| 14   | 5954     | 6285 | 6615  | 6945  | 7276  | 7606  | 7937  | 8268  | 8599  | 8930  | 9261  |
| 15   | 9258     | 9588 | 9918  | 10248 | 10578 | 10909 | 11239 | 11569 | 11899 | 12229 | 12559 |
| 16   | 119 2559 | 2889 | 3219  | 3549  | 3879  | 4209  | 4539  | 4869  | 5199  | 5529  | 5859  |
| 17   | 5858     | 6187 | 6517  | 6847  | 7177  | 7507  | 7837  | 8167  | 8497  | 8827  | 9157  |
| 18   | 9154     | 9484 | 9814  | 10144 | 10474 | 10804 | 11134 | 11464 | 11794 | 12124 | 12454 |
| 19   | 120 2448 | 2777 | 3106  | 3436  | 3765  | 4095  | 4425  | 4755  | 5085  | 5415  | 5745  |
| 1320 | 5739     | 6068 | 6397  | 6726  | 7055  | 7384  | 7714  | 8043  | 8373  | 8702  | 9032  |
| 21   | 9028     | 9357 | 9686  | 10014 | 10343 | 10672 | 11001 | 11330 | 11659 | 11988 | 12317 |
| 22   | 121 2315 | 2643 | 2972  | 3301  | 3630  | 3959  | 4288  | 4617  | 4946  | 5275  | 5604  |
| 23   | 5598     | 5927 | 6255  | 6584  | 6913  | 7242  | 7571  | 7900  | 8229  | 8558  | 8887  |
| 24   | 8880     | 9208 | 9536  | 9865  | 10194 | 10523 | 10852 | 11181 | 11510 | 11839 | 12168 |
| 25   | 122 2159 | 2487 | 2815  | 3143  | 3470  | 3797  | 4125  | 4453  | 4781  | 5109  | 5437  |
| 26   | 5435     | 5763 | 6090  | 6418  | 6745  | 7073  | 7400  | 7728  | 8055  | 8383  | 8710  |
| 27   | 8700     | 9036 | 9364  | 9691  | 10018 | 10345 | 10672 | 11000 | 11327 | 11654 | 11981 |
| 28   | 123 1981 | 2308 | 2635  | 2962  | 3289  | 3616  | 3943  | 4270  | 4597  | 4924  | 5251  |
| 29   | 5250     | 5577 | 5904  | 6230  | 6557  | 6884  | 7211  | 7538  | 7865  | 8192  | 8519  |
| 1330 | 8516     | 8843 | 9169  | 9496  | 9822  | 10149 | 10475 | 10802 | 11128 | 11455 | 11781 |
| 31   | 124 1781 | 2107 | 2433  | 2759  | 3084  | 3410  | 3735  | 4061  | 4386  | 4711  | 5037  |
| 32   | 5042     | 5368 | 5694  | 6020  | 6346  | 6671  | 6997  | 7322  | 7647  | 7972  | 8297  |
| 33   | 8201     | 8527 | 8853  | 9179  | 9504  | 9830  | 10155 | 10481 | 10806 | 11132 | 11457 |
| 34   | 125 1558 | 1884 | 2210  | 2535  | 2860  | 3185  | 3510  | 3835  | 4160  | 4485  | 4810  |
| 35   | 4813     | 5138 | 5463  | 5788  | 6113  | 6438  | 6763  | 7088  | 7413  | 7738  | 8063  |
| 36   | 8065     | 8390 | 8715  | 9040  | 9365  | 9690  | 10015 | 10340 | 10665 | 10990 | 11315 |
| 37   | 126 1314 | 1639 | 1964  | 2288  | 2613  | 2938  | 3263  | 3588  | 3913  | 4238  | 4563  |
| 38   | 4561     | 4886 | 5210  | 5535  | 5860  | 6185  | 6510  | 6835  | 7160  | 7485  | 7810  |
| 39   | 7806     | 8130 | 8454  | 8779  | 9103  | 9428  | 9752  | 10077 | 10401 | 10726 | 11050 |
| 1340 | 127 1048 | 1372 | 1696  | 2020  | 2344  | 2668  | 2992  | 3316  | 3640  | 3964  | 4288  |
| 41   | 4288     | 4612 | 4935  | 5259  | 5583  | 5907  | 6230  | 6554  | 6878  | 7201  | 7525  |
| 42   | 7525     | 7849 | 8172  | 8496  | 8819  | 9143  | 9466  | 9790  | 10113 | 10437 | 10760 |
| 43   | 128 0760 | 1083 | 1407  | 1730  | 2053  | 2377  | 2700  | 3023  | 3346  | 3669  | 3992  |
| 44   | 3993     | 4316 | 4639  | 4962  | 5285  | 5608  | 5931  | 6254  | 6577  | 6900  | 7223  |
| 45   | 7223     | 7546 | 7869  | 8191  | 8514  | 8837  | 9160  | 9483  | 9806  | 10129 | 10452 |
| 46   | 129 0451 | 0773 | 1096  | 1418  | 1741  | 2064  | 2387  | 2710  | 3033  | 3356  | 3679  |
| 47   | 3676     | 3998 | 4321  | 4643  | 4965  | 5288  | 5610  | 5933  | 6255  | 6578  | 6900  |
| 48   | 6899     | 7221 | 7543  | 7865  | 8187  | 8509  | 8831  | 9153  | 9475  | 9797  | 10119 |
| 49   | 130 0110 | 0431 | 0763  | 1085  | 1407  | 1729  | 2051  | 2373  | 2695  | 3017  | 3339  |
| 1350 | 3338     | 3659 | 3981  | 4303  | 4624  | 4946  | 5267  | 5589  | 5910  | 6231  | 6552  |

| N.    | 0 | 1       | 2 | 3 | 4     | 5 | 6       | 7 | 8 | 9 | P. P. |
|-------|---|---------|---|---|-------|---|---------|---|---|---|-------|
| 13000 | m | 3 36 40 |   |   | 13000 | m | 0 21 40 |   |   |   |       |
| 13100 | m | 3 38 20 |   |   | 13100 | m | 0 23 50 |   |   |   |       |
| 13200 | m | 3 40 0  |   |   | 13200 | m | 0 26 0  |   |   |   |       |
| 13300 | m | 3 41 40 |   |   | 13300 | m | 0 28 10 |   |   |   |       |
| 13400 | m | 3 43 20 |   |   | 13400 | m | 0 30 20 |   |   |   |       |



| N.   | 0        | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | P. P. |
|------|----------|------|------|------|------|------|------|------|------|------|-------|
| 1350 | 110 3318 | 1059 | 1081 | 4103 | 4024 | 4946 | 5267 | 5589 | 5911 | 6232 |       |
| 51   | 6554     | 6875 | 7196 | 7518 | 7840 | 8161 | 8482 | 8803 | 9124 | 9446 |       |
| 52   | 9767     | 6588 | 6909 | 7230 | 7552 | 7873 | 8194 | 8515 | 8836 | 9157 |       |
| 53   | 111 2078 | 1209 | 1620 | 1941 | 2262 | 2583 | 2904 | 3225 | 3546 | 3867 |       |
| 54   | 6082     | 6507 | 6828 | 7149 | 7469 | 7790 | 8111 | 8431 | 8752 | 9072 |       |
| 55   | 9194     | 9714 | 6014 | 6334 | 6655 | 6975 | 7296 | 7616 | 7937 | 8257 |       |
| 56   | 112 2597 | 2917 | 1437 | 1558 | 1878 | 2198 | 2518 | 2838 | 3158 | 3478 |       |
| 57   | 5798     | 6119 | 6439 | 6758 | 7078 | 7398 | 7718 | 8038 | 8358 | 8678 |       |
| 58   | 8998     | 9317 | 9637 | 9957 | 7057 | 7377 | 7696 | 8016 | 8336 | 8656 |       |
| 59   | 113 2195 | 2515 | 2835 | 3155 | 3475 | 3795 | 4115 | 4435 | 4755 | 5075 |       |
| 1360 | 5489     | 5708 | 6028 | 6347 | 6666 | 6985 | 7305 | 7624 | 7943 | 8262 |       |
| 61   | 8581     | 8901 | 9221 | 9541 | 9861 | 7061 | 7381 | 7701 | 8021 | 8341 |       |
| 62   | 114 1771 | 2091 | 2411 | 2731 | 3051 | 3371 | 3691 | 4011 | 4331 | 4651 |       |
| 63   | 4959     | 5277 | 5596 | 5914 | 6233 | 6551 | 6870 | 7188 | 7507 | 7825 |       |
| 64   | 8144     | 8463 | 8782 | 9099 | 9417 | 9735 | 7054 | 7372 | 7690 | 8008 |       |
| 65   | 115 1327 | 1645 | 1963 | 2281 | 2599 | 2917 | 3235 | 3553 | 3871 | 4189 |       |
| 66   | 4507     | 4825 | 5143 | 5461 | 5779 | 6096 | 6414 | 6732 | 7050 | 7367 |       |
| 67   | 7682     | 8001 | 8319 | 8638 | 8956 | 9274 | 9591 | 9908 | 7026 | 7344 |       |
| 68   | 116 0861 | 1179 | 1496 | 1814 | 2131 | 2448 | 2765 | 3081 | 3398 | 3715 |       |
| 69   | 4014     | 4332 | 4650 | 4967 | 5284 | 5601 | 5917 | 6234 | 6550 | 6867 |       |
| 1370 | 7206     | 7524 | 7841 | 8157 | 8474 | 8791 | 9107 | 9424 | 9740 | 7056 |       |
| 71   | 117 0475 | 0791 | 1108 | 1424 | 1741 | 2057 | 2374 | 2691 | 2998 | 3314 |       |
| 72   | 3511     | 3828 | 4144 | 4461 | 4777 | 5094 | 5411 | 5727 | 6043 | 6359 |       |
| 73   | 6705     | 7022 | 7338 | 7654 | 7970 | 8287 | 8603 | 8919 | 9235 | 9551 |       |
| 74   | 9860     | 0176 | 0491 | 0808 | 1124 | 1441 | 1757 | 2073 | 2389 | 2705 |       |
| 75   | 118 1327 | 1643 | 1959 | 2275 | 2591 | 2907 | 3223 | 3539 | 3855 | 4171 |       |
| 76   | 6183     | 6500 | 6816 | 7132 | 7448 | 7764 | 8080 | 8396 | 8712 | 9028 |       |
| 77   | 9349     | 9665 | 9981 | 7097 | 7413 | 7729 | 8045 | 8361 | 8677 | 8993 |       |
| 78   | 119 2495 | 2811 | 3127 | 3443 | 3759 | 4075 | 4391 | 4707 | 5023 | 5339 |       |
| 79   | 5641     | 5957 | 6273 | 6589 | 6905 | 7221 | 7537 | 7853 | 8169 | 8485 |       |
| 1380 | 8791     | 9107 | 9423 | 9739 | 7055 | 7371 | 7687 | 8003 | 8319 | 8635 |       |
| 81   | 120 0957 | 1273 | 1589 | 1905 | 2221 | 2537 | 2853 | 3169 | 3485 | 3801 |       |
| 82   | 4053     | 4369 | 4685 | 4999 | 5315 | 5631 | 5947 | 6263 | 6579 | 6895 |       |
| 83   | 8224     | 8540 | 8856 | 9172 | 9488 | 9804 | 7120 | 7436 | 7752 | 8068 |       |
| 84   | 114 1101 | 1417 | 1733 | 2049 | 2365 | 2681 | 2997 | 3313 | 3629 | 3945 |       |
| 85   | 4498     | 4814 | 5130 | 5446 | 5762 | 6078 | 6394 | 6710 | 7026 | 7342 |       |
| 86   | 7675     | 7991 | 8307 | 8623 | 8939 | 9255 | 9571 | 9887 | 7203 | 7    |       |
| 87   | 121 0713 | 1029 | 1345 | 1661 | 1977 | 2293 | 2609 | 2925 | 3241 | 3557 |       |
| 88   | 3899     | 4215 | 4531 | 4847 | 5163 | 5479 | 5795 | 6111 | 6427 | 6743 |       |
| 89   | 7085     | 7401 | 7717 | 8033 | 8349 | 8665 | 8981 | 9297 | 7613 | 7    |       |
| 1390 | 111 1418 | 1734 | 2050 | 2366 | 2682 | 2998 | 3314 | 3630 | 3946 | 4262 |       |
| 91   | 1271     | 1587 | 1903 | 2219 | 2535 | 2851 | 3167 | 3483 | 3799 | 4115 |       |
| 92   | 6493     | 6809 | 7125 | 7441 | 7757 | 8073 | 8389 | 8705 | 9021 | 9337 |       |
| 93   | 9615     | 9931 | 7247 | 7563 | 7879 | 8195 | 8511 | 8827 | 9143 | 9459 |       |
| 94   | 112 1612 | 1928 | 2244 | 2560 | 2876 | 3192 | 3508 | 3824 | 4140 | 4456 |       |
| 95   | 5734     | 6050 | 6366 | 6682 | 6998 | 7314 | 7630 | 7946 | 8262 | 8578 |       |
| 96   | 8856     | 9172 | 9488 | 9804 | 7120 | 7436 | 7752 | 8068 | 8384 | 8700 |       |
| 97   | 113 1810 | 2126 | 2442 | 2758 | 3074 | 3390 | 3706 | 4022 | 4338 | 4654 |       |
| 98   | 6032     | 6348 | 6664 | 6980 | 7296 | 7612 | 7928 | 8244 | 8560 | 8876 |       |
| 99   | 9154     | 9470 | 9786 | 7102 | 7418 | 7734 | 8050 | 8366 | 8682 | 8998 |       |
| 1400 | 114 1310 | 1626 | 1942 | 2258 | 2574 | 2890 | 3206 | 3522 | 3838 | 4154 |       |

| N.    | 0    | 1 | 2 | 3 | 4     | 5    | 6  | 7      | 8    | 9  | P.P. |
|-------|------|---|---|---|-------|------|----|--------|------|----|------|
| 11500 | 1 45 | 0 |   |   | 11500 | 0 11 | 10 | 11.465 | 5718 | T. | 5811 |
| 11600 | 1 46 | 0 |   |   | 11600 | 0 11 | 10 |        | 5712 |    | 5812 |
| 11700 | 1 47 | 0 |   |   | 11700 | 0 11 | 10 |        | 5717 |    | 5813 |
| 11800 | 1 48 | 0 |   |   | 11800 | 0 11 | 10 |        | 5716 |    | 5814 |



| N.          | 0        | 1     | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | P. P. |     |
|-------------|----------|-------|------|------|------|------|------|------|------|------|-------|-----|
| <b>1400</b> | 146 1280 | 1591  | 1901 | 2211 | 2521 | 2831 | 3141 | 3451 | 3761 | 4071 | 311   | 310 |
| 01          | 4381     | 4691  | 5001 | 5311 | 5621 | 5931 | 6241 | 6551 | 6861 | 7170 | 311   | 310 |
| 02          | 7480     | 7790  | 8100 | 8409 | 8719 | 9029 | 9338 | 9648 | 9958 | 5267 | 312   | 311 |
| 03          | 147 0577 | 0886  | 1196 | 1505 | 1815 | 2124 | 2434 | 2743 | 3052 | 3362 | 313   | 312 |
| 04          | 3671     | 3980  | 4290 | 4599 | 4908 | 5217 | 5527 | 5836 | 6145 | 6454 | 314   | 313 |
| 05          | 6761     | 7072  | 7381 | 7690 | 7999 | 8308 | 8617 | 8926 | 9235 | 9544 | 315   | 314 |
| 06          | 9853     | 0162  | 0471 | 0780 | 1089 | 1397 | 1706 | 2015 | 2324 | 2632 | 316   | 315 |
| 07          | 148 2941 | 3250  | 3558 | 3867 | 4175 | 4484 | 4793 | 5101 | 5410 | 5718 | 317   | 316 |
| 08          | 6027     | 6335  | 6643 | 6952 | 7260 | 7569 | 7877 | 8185 | 8493 | 8802 | 318   | 317 |
| 09          | 9110     | 9418  | 9726 | 0035 | 0343 | 0651 | 0959 | 1267 | 1575 | 1883 | 319   | 318 |
| <b>1410</b> | 149 2191 | 2499  | 2807 | 3115 | 3423 | 3731 | 4039 | 4347 | 4655 | 4962 | 309   | 308 |
| 11          | 5270     | 5578  | 5886 | 6193 | 6501 | 6809 | 7116 | 7424 | 7732 | 8039 | 310   | 309 |
| 12          | 8347     | 8655  | 8962 | 9270 | 9577 | 9885 | 0192 | 0499 | 0807 | 1114 | 311   | 310 |
| 13          | 150 1422 | 1729  | 2036 | 2344 | 2651 | 2958 | 3265 | 3573 | 3880 | 4187 | 312   | 311 |
| 14          | 4494     | 4801  | 5108 | 5415 | 5722 | 6030 | 6337 | 6644 | 6951 | 7257 | 313   | 312 |
| 15          | 7564     | 7871  | 8178 | 8485 | 8792 | 9099 | 9406 | 9712 | 0019 | 0326 | 314   | 313 |
| 16          | 151 0033 | 0339  | 0646 | 0953 | 1259 | 1566 | 1872 | 2179 | 2485 | 2792 | 315   | 314 |
| 17          | 3699     | 4005  | 4311 | 4618 | 4924 | 5231 | 5537 | 5843 | 6150 | 6456 | 316   | 315 |
| 18          | 6762     | 7069  | 7375 | 7681 | 7987 | 8293 | 8600 | 8906 | 9212 | 9518 | 317   | 316 |
| 19          | 9824     | 0130  | 0436 | 0742 | 1048 | 1354 | 1660 | 1966 | 2272 | 2578 | 318   | 317 |
| <b>1420</b> | 152 2883 | 3189  | 3495 | 3801 | 4107 | 4412 | 4718 | 5024 | 5329 | 5635 | 307   | 306 |
| 21          | 5941     | 6246  | 6552 | 6858 | 7163 | 7469 | 7774 | 8080 | 8385 | 8691 | 310   | 309 |
| 22          | 8996     | 9301  | 9607 | 9912 | 0217 | 0523 | 0828 | 1133 | 1439 | 1744 | 311   | 310 |
| 23          | 153 2049 | 2354  | 2659 | 2964 | 3270 | 3575 | 3880 | 4185 | 4490 | 4795 | 312   | 311 |
| 24          | 5100     | 5405  | 5710 | 6015 | 6320 | 6625 | 6929 | 7234 | 7539 | 7844 | 313   | 312 |
| 25          | 8149     | 8453  | 8758 | 9063 | 9368 | 9672 | 9977 | 0281 | 0586 | 0891 | 314   | 313 |
| 26          | 154 1195 | 1500  | 1804 | 2109 | 2413 | 2718 | 3022 | 3327 | 3631 | 3935 | 315   | 314 |
| 27          | 4240     | 4544  | 4848 | 5153 | 5457 | 5761 | 6065 | 6370 | 6674 | 6978 | 316   | 315 |
| 28          | 7282     | 7586  | 7890 | 8194 | 8498 | 8802 | 9106 | 9410 | 9714 | 0018 | 317   | 316 |
| 29          | 155 0322 | 0626  | 0930 | 1234 | 1538 | 1842 | 2145 | 2449 | 2753 | 3057 | 318   | 317 |
| <b>1430</b> | 3360     | 3664  | 3968 | 4271 | 4575 | 4879 | 5182 | 5486 | 5789 | 6093 | 303   | 302 |
| 31          | 6396     | 6700  | 7003 | 7307 | 7610 | 7914 | 8217 | 8520 | 8824 | 9127 | 310   | 309 |
| 32          | 9430     | 9733  | 0037 | 0340 | 0643 | 0946 | 1249 | 1553 | 1856 | 2159 | 311   | 310 |
| 33          | 156 2462 | 2765  | 3068 | 3371 | 3674 | 3977 | 4280 | 4583 | 4886 | 5189 | 312   | 311 |
| 34          | 5492     | 5794  | 6097 | 6400 | 6703 | 7006 | 7308 | 7611 | 7914 | 8216 | 313   | 312 |
| 35          | 8519     | 8822  | 9124 | 9427 | 9729 | 0032 | 0334 | 0637 | 0939 | 1242 | 314   | 313 |
| 36          | 157 1544 | 1847  | 2149 | 2452 | 2754 | 3056 | 3359 | 3661 | 3963 | 4265 | 315   | 314 |
| 37          | 4568     | 4870  | 5172 | 5474 | 5776 | 6079 | 6381 | 6683 | 6985 | 7287 | 316   | 315 |
| 38          | 7589     | 7891  | 8193 | 8495 | 8797 | 9099 | 9401 | 9702 | 0004 | 0306 | 317   | 316 |
| 39          | 158 0608 | 0910  | 1212 | 1513 | 1815 | 2117 | 2418 | 2720 | 3022 | 3323 | 318   | 317 |
| <b>1440</b> | 3625     | 3927  | 4228 | 4530 | 4831 | 5133 | 5434 | 5736 | 6037 | 6338 | 301   | 300 |
| 41          | 6640     | 6941  | 7243 | 7544 | 7845 | 8146 | 8448 | 8749 | 9050 | 9351 | 310   | 309 |
| 42          | 9653     | 9954  | 0255 | 0556 | 0857 | 1158 | 1459 | 1760 | 2061 | 2362 | 311   | 310 |
| 43          | 159 2663 | 2964  | 3265 | 3566 | 3867 | 4168 | 4469 | 4770 | 5070 | 5371 | 312   | 311 |
| 44          | 5672     | 5973  | 6273 | 6574 | 6875 | 7175 | 7476 | 7777 | 8077 | 8378 | 313   | 312 |
| 45          | 8678     | 8979  | 9280 | 9580 | 9881 | 0181 | 0482 | 0782 | 1082 | 1383 | 314   | 313 |
| 46          | 160 1683 | 1983  | 2284 | 2584 | 2884 | 3184 | 3485 | 3785 | 4085 | 4385 | 315   | 314 |
| 47          | 4685     | 4985  | 5286 | 5586 | 5886 | 6186 | 6486 | 6786 | 7086 | 7386 | 316   | 315 |
| 48          | 7686     | 7986  | 8285 | 8585 | 8885 | 9185 | 9485 | 9785 | 0084 | 0384 | 317   | 316 |
| 49          | 161 0684 | 0984  | 1283 | 1583 | 1883 | 2182 | 2482 | 2781 | 3081 | 3380 | 318   | 317 |
| <b>1450</b> | 3680     | 3980  | 4279 | 4578 | 4878 | 5177 | 5477 | 5776 | 6075 | 6375 | 299   | 298 |
| 51          | 6680     | 6980  | 7279 | 7578 | 7878 | 8177 | 8477 | 8776 | 9075 | 9375 | 310   | 309 |
| 52          | 9680     | 9980  | 0279 | 0578 | 0878 | 1177 | 1477 | 1776 | 2075 | 2375 | 311   | 310 |
| 53          | 162 2680 | 2980  | 3279 | 3578 | 3878 | 4177 | 4477 | 4776 | 5075 | 5375 | 312   | 311 |
| 54          | 5680     | 5980  | 6279 | 6578 | 6878 | 7177 | 7477 | 7776 | 8075 | 8375 | 313   | 312 |
| 55          | 8680     | 8980  | 9279 | 9578 | 9878 | 0177 | 0477 | 0776 | 1075 | 1375 | 314   | 313 |
| 56          | 163 1680 | 1980  | 2279 | 2578 | 2878 | 3177 | 3477 | 3776 | 4075 | 4375 | 315   | 314 |
| 57          | 4680     | 4980  | 5279 | 5578 | 5878 | 6177 | 6477 | 6776 | 7075 | 7375 | 316   | 315 |
| 58          | 7680     | 7980  | 8279 | 8578 | 8878 | 9177 | 9477 | 9776 | 0075 | 0375 | 317   | 316 |
| 59          | 164 0680 | 0980  | 1279 | 1578 | 1878 | 2177 | 2477 | 2776 | 3075 | 3375 | 318   | 317 |
| <b>1460</b> | 3685     | 3985  | 4284 | 4583 | 4883 | 5182 | 5482 | 5781 | 6080 | 6380 | 297   | 296 |
| 61          | 6685     | 6985  | 7284 | 7583 | 7883 | 8182 | 8482 | 8781 | 9080 | 9380 | 310   | 309 |
| 62          | 9685     | 9985  | 0284 | 0583 | 0883 | 1182 | 1482 | 1781 | 2080 | 2380 | 311   | 310 |
| 63          | 165 2685 | 2985  | 3284 | 3583 | 3883 | 4182 | 4482 | 4781 | 5080 | 5380 | 312   | 311 |
| 64          | 5685     | 5985  | 6284 | 6583 | 6883 | 7182 | 7482 | 7781 | 8080 | 8380 | 313   | 312 |
| 65          | 8685     | 8985  | 9284 | 9583 | 9883 | 0182 | 0482 | 0781 | 1080 | 1380 | 314   | 313 |
| 66          | 166 1685 | 1985  | 2284 | 2583 | 2883 | 3182 | 3482 | 3781 | 4080 | 4380 | 315   | 314 |
| 67          | 4685     | 4985  | 5284 | 5583 | 5883 | 6182 | 6482 | 6781 | 7080 | 7380 | 316   | 315 |
| 68          | 7685     | 7985  | 8284 | 8583 | 8883 | 9182 | 9482 | 9781 | 0080 | 0380 | 317   | 316 |
| 69          | 167 0685 | 0985  | 1284 | 1583 | 1883 | 2182 | 2482 | 2781 | 3080 | 3380 | 318   | 317 |
| <b>1470</b> | 3690     | 3990  | 4289 | 4588 | 4888 | 5187 | 5487 | 5786 | 6085 | 6385 | 295   | 294 |
| 71          | 6690     | 6990  | 7289 | 7588 | 7888 | 8187 | 8487 | 8786 | 9085 | 9385 | 310   | 309 |
| 72          | 9690     | 9990  | 0289 | 0588 | 0888 | 1187 | 1487 | 1786 | 2085 | 2385 | 311   | 310 |
| 73          | 168 2690 | 2990  | 3289 | 3588 | 3888 | 4187 | 4487 | 4786 | 5085 | 5385 | 312   | 311 |
| 74          | 5690     | 5990  | 6289 | 6588 | 6888 | 7187 | 7487 | 7786 | 8085 | 8385 | 313   | 312 |
| 75          | 8690     | 8990  | 9289 | 9588 | 9888 | 0187 | 0487 | 0786 | 1085 | 1385 | 314   | 313 |
| 76          | 169 1690 | 1990  | 2289 | 2588 | 2888 | 3187 | 3487 | 3786 | 4085 | 4385 | 315   | 314 |
| 77          | 4690     | 4990  | 5289 | 5588 | 5888 | 6187 | 6487 | 6786 | 7085 | 7385 | 316   | 315 |
| 78          | 7690     | 7990  | 8289 | 8588 | 8888 | 9187 | 9487 | 9786 | 0085 | 0385 | 317   | 316 |
| 79          | 170 0690 | 0990  | 1289 | 1588 | 1888 | 2187 | 2487 | 2786 | 3085 | 3385 | 318   | 317 |
| <b>1480</b> | 3695     | 3995  | 4294 | 4593 | 4893 | 5192 | 5492 | 5791 | 6090 | 6390 | 293   | 292 |
| 81          | 6695     | 6995  | 7294 | 7593 | 7893 | 8192 | 8492 | 8791 | 9090 | 9390 | 310   | 309 |
| 82          | 9695     | 9995  | 0294 | 0593 | 0893 | 1192 | 1492 | 1791 | 2090 | 2390 | 311   | 310 |
| 83          | 171 2695 | 2995  | 3294 | 3593 | 3893 | 4192 | 4492 | 4791 | 5090 | 5390 | 312   | 311 |
| 84          | 5695     | 5995  | 6294 | 6593 | 6893 | 7192 | 7492 | 7791 | 8090 | 8390 | 313   | 312 |
| 85          | 8695     | 8995  | 9294 | 9593 | 9893 | 0192 | 0492 | 0791 | 1090 | 1390 | 314   | 313 |
| 86          | 172 1695 | 1995  | 2294 | 2593 | 2893 | 3192 | 3492 | 3791 | 4090 | 4390 | 315   | 314 |
| 87          | 4695     | 4995  | 5294 | 5593 | 5893 | 6192 | 6492 | 6791 | 7090 | 7390 | 316   | 315 |
| 88          | 7695     | 7995  | 8294 | 8593 | 8893 | 9192 | 9492 | 9791 | 0090 | 0390 | 317   | 316 |
| 89          | 173 0695 | 0995  | 1294 | 1593 | 1893 | 2192 | 2492 | 2791 | 3090 | 3390 | 318   | 317 |
| <b>1490</b> | 3700     | 4000  | 4299 | 4598 | 4898 | 5197 | 5497 | 5796 | 6095 | 6395 | 291   | 290 |
| 91          | 6700     | 7000  | 7299 | 7598 | 7898 | 8197 | 8497 | 8796 | 9095 | 9395 | 310   | 309 |
| 92          | 9700     | 10000 | 0299 | 0598 | 0898 | 1197 | 1497 | 1796 | 2095 | 2395 | 311   | 310 |
| 93          | 174 2700 | 3000  | 3299 | 3598 | 3898 | 4197 | 4497 | 4796 | 5095 | 5395 | 312   | 311 |
| 94          | 5700     | 6000  | 6299 | 6598 | 6898 | 7197 | 7497 | 7796 | 8095 | 8395 | 313   | 312 |
| 95          | 8700     | 9000  | 9299 | 9598 | 9898 | 0197 | 0497 | 0796 | 1095 | 1395 | 314   | 313 |
| 96          | 175 1700 | 2000  | 2299 | 2598 | 2898 | 3197 | 3497 | 3796 | 4095 | 4395 | 315   | 314 |
| 97          | 4700     | 5000  | 5299 | 5598 | 5898 | 6197 | 6497 | 6796 | 7095 | 7395 | 316   | 315 |
| 98          | 7700     | 8000  | 8299 | 8598 | 8898 | 9197 | 9497 | 9796 | 0095 | 0395 | 317   | 316 |
| 99          | 176 0700 | 1000  | 1299 | 1598 | 1898 | 2197 | 2497 | 2796 | 3095 | 3395 | 318   | 317 |

N. 0 1 2 3 4 5 6 7 8 9 P. P.

14000' = 3° 53' 20" 1400' = 0° 23' 20" S. 4.68



| N.    | 0        | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9     | P. P.              |
|-------|----------|------|------|------|------|------|------|------|------|-------|--------------------|
| 1450  | 161 3680 | 1080 | 4429 | 4878 | 4878 | 5177 | 5177 | 5776 | 6075 | 6375  |                    |
| 51    | 6074     | 6074 | 7374 | 7374 | 7374 | 8174 | 8174 | 8769 | 9068 | 9367  |                    |
| 52    | 9366     | 9366 | 9366 | 9366 | 9366 | 1016 | 1016 | 1016 | 1016 | 1016  |                    |
| 53    | 162 2656 | 2855 | 1354 | 1353 | 1852 | 1852 | 1949 | 1948 | 2047 | 2145  |                    |
| 54    | 5644     | 5644 | 6344 | 6344 | 6344 | 7143 | 7143 | 7738 | 8037 | 8336  |                    |
| 55    | 8036     | 8036 | 9336 | 9336 | 9336 | 1013 | 1013 | 1013 | 1013 | 1013  |                    |
| 56    | 163 1614 | 1913 | 2210 | 2210 | 2210 | 2807 | 2807 | 3304 | 3603 | 3902  |                    |
| 57    | 4896     | 4896 | 5594 | 5594 | 5594 | 6393 | 6393 | 6988 | 7287 | 7586  |                    |
| 58    | 7578     | 7578 | 8174 | 8174 | 8174 | 8769 | 8769 | 9364 | 9663 | 9962  |                    |
| 59    | 164 0554 | 0853 | 1150 | 1150 | 1150 | 1747 | 1747 | 2244 | 2543 | 2842  |                    |
| 1460  | 3129     | 1846 | 2144 | 2144 | 2144 | 2741 | 2741 | 3238 | 3537 | 3836  |                    |
| 61    | 6074     | 6074 | 7374 | 7374 | 7374 | 8174 | 8174 | 8769 | 9068 | 9367  |                    |
| 62    | 9366     | 9366 | 9366 | 9366 | 9366 | 1016 | 1016 | 1016 | 1016 | 1016  |                    |
| 63    | 165 2441 | 2740 | 3037 | 3037 | 3037 | 3634 | 3634 | 4131 | 4430 | 4729  |                    |
| 64    | 5441     | 5441 | 6141 | 6141 | 6141 | 6736 | 6736 | 7233 | 7532 | 7831  |                    |
| 65    | 7830     | 7830 | 8529 | 8529 | 8529 | 9124 | 9124 | 9621 | 9920 | 10219 |                    |
| 66    | 166 1441 | 1740 | 2037 | 2037 | 2037 | 2634 | 2634 | 3131 | 3430 | 3729  |                    |
| 67    | 4731     | 4731 | 5430 | 5430 | 5430 | 6025 | 6025 | 6522 | 6821 | 7120  |                    |
| 68    | 7120     | 7120 | 7819 | 7819 | 7819 | 8414 | 8414 | 8911 | 9210 | 9509  |                    |
| 69    | 167 0441 | 0740 | 1037 | 1037 | 1037 | 1634 | 1634 | 2131 | 2430 | 2729  |                    |
| 1470  | 3129     | 1846 | 2144 | 2144 | 2144 | 2741 | 2741 | 3238 | 3537 | 3836  |                    |
| 71    | 6074     | 6074 | 7374 | 7374 | 7374 | 8174 | 8174 | 8769 | 9068 | 9367  |                    |
| 72    | 9366     | 9366 | 9366 | 9366 | 9366 | 1016 | 1016 | 1016 | 1016 | 1016  |                    |
| 73    | 168 2441 | 2740 | 3037 | 3037 | 3037 | 3634 | 3634 | 4131 | 4430 | 4729  |                    |
| 74    | 5441     | 5441 | 6141 | 6141 | 6141 | 6736 | 6736 | 7233 | 7532 | 7831  |                    |
| 75    | 7830     | 7830 | 8529 | 8529 | 8529 | 9124 | 9124 | 9621 | 9920 | 10219 |                    |
| 76    | 169 1441 | 1740 | 2037 | 2037 | 2037 | 2634 | 2634 | 3131 | 3430 | 3729  |                    |
| 77    | 4731     | 4731 | 5430 | 5430 | 5430 | 6025 | 6025 | 6522 | 6821 | 7120  |                    |
| 78    | 7120     | 7120 | 7819 | 7819 | 7819 | 8414 | 8414 | 8911 | 9210 | 9509  |                    |
| 79    | 170 0441 | 0740 | 1037 | 1037 | 1037 | 1634 | 1634 | 2131 | 2430 | 2729  |                    |
| 1480  | 3129     | 1846 | 2144 | 2144 | 2144 | 2741 | 2741 | 3238 | 3537 | 3836  |                    |
| 81    | 6074     | 6074 | 7374 | 7374 | 7374 | 8174 | 8174 | 8769 | 9068 | 9367  |                    |
| 82    | 9366     | 9366 | 9366 | 9366 | 9366 | 1016 | 1016 | 1016 | 1016 | 1016  |                    |
| 83    | 171 2441 | 2740 | 3037 | 3037 | 3037 | 3634 | 3634 | 4131 | 4430 | 4729  |                    |
| 84    | 5441     | 5441 | 6141 | 6141 | 6141 | 6736 | 6736 | 7233 | 7532 | 7831  |                    |
| 85    | 7830     | 7830 | 8529 | 8529 | 8529 | 9124 | 9124 | 9621 | 9920 | 10219 |                    |
| 86    | 172 1441 | 1740 | 2037 | 2037 | 2037 | 2634 | 2634 | 3131 | 3430 | 3729  |                    |
| 87    | 4731     | 4731 | 5430 | 5430 | 5430 | 6025 | 6025 | 6522 | 6821 | 7120  |                    |
| 88    | 7120     | 7120 | 7819 | 7819 | 7819 | 8414 | 8414 | 8911 | 9210 | 9509  |                    |
| 89    | 173 0441 | 0740 | 1037 | 1037 | 1037 | 1634 | 1634 | 2131 | 2430 | 2729  |                    |
| 1490  | 3129     | 1846 | 2144 | 2144 | 2144 | 2741 | 2741 | 3238 | 3537 | 3836  |                    |
| 91    | 6074     | 6074 | 7374 | 7374 | 7374 | 8174 | 8174 | 8769 | 9068 | 9367  |                    |
| 92    | 9366     | 9366 | 9366 | 9366 | 9366 | 1016 | 1016 | 1016 | 1016 | 1016  |                    |
| 93    | 174 2441 | 2740 | 3037 | 3037 | 3037 | 3634 | 3634 | 4131 | 4430 | 4729  |                    |
| 94    | 5441     | 5441 | 6141 | 6141 | 6141 | 6736 | 6736 | 7233 | 7532 | 7831  |                    |
| 95    | 7830     | 7830 | 8529 | 8529 | 8529 | 9124 | 9124 | 9621 | 9920 | 10219 |                    |
| 96    | 175 1441 | 1740 | 2037 | 2037 | 2037 | 2634 | 2634 | 3131 | 3430 | 3729  |                    |
| 97    | 4731     | 4731 | 5430 | 5430 | 5430 | 6025 | 6025 | 6522 | 6821 | 7120  |                    |
| 98    | 7120     | 7120 | 7819 | 7819 | 7819 | 8414 | 8414 | 8911 | 9210 | 9509  |                    |
| 99    | 176 0441 | 0740 | 1037 | 1037 | 1037 | 1634 | 1634 | 2131 | 2430 | 2729  |                    |
| 1500  | 176 0441 | 1800 | 1491 | 1141 | 0641 | 0140 | 2639 | 1939 | 1138 | 2137  |                    |
| N.    | 0        | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9     | P. P.              |
| 14900 | ==       | 4    | 1    | 40   |      | 1490 | ==   | 0    | 14   | 10    | N 4685 3711 T 1800 |
| 14900 | ==       | 4    | 1    | 40   |      | 1490 | ==   | 0    | 14   | 10    | 3711 3801          |
| 14900 | ==       | 4    | 1    | 40   |      | 1490 | ==   | 0    | 14   | 10    | 3711 3801          |
| 14900 | ==       | 4    | 1    | 40   |      | 1490 | ==   | 0    | 14   | 10    | 3711 3801          |
| 14900 | ==       | 4    | 1    | 40   |      | 1490 | ==   | 0    | 14   | 10    | 3711 3801          |



| N.   | 0        | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16   | 17   | 18   | 19   | 20   | 21   | 22   | 23   | 24   | 25   | 26   | 27   | 28   | 29   | 30   | 31   | 32   | 33   | 34   | 35   | 36   | 37   | 38   | 39   | 40   | 41   | 42   | 43   | 44   | 45   | 46   | 47   | 48   | 49   | 50   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |     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|------|----------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--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| N.   | 0       | 1    | 2    | 3    | 4    | 5    | 6     | 7     | 8     | 9     | P. P. |
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| 1550 | 19 1117 | 1592 | 1877 | 4157 | 4438 | 4718 | 4998  | 5278  | 5558  | 5838  |       |
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| 53   | 6676    | 6756 | 7186 | 7516 | 7796 | 8076 | 8355  | 8635  | 8915  | 9195  |       |
| 54   | 6955    | 7035 | 7465 | 7795 | 8075 | 8354 | 8634  | 8914  | 9194  | 9474  |       |
| 55   | 7234    | 7314 | 7744 | 8074 | 8353 | 8633 | 8913  | 9193  | 9473  | 9753  |       |
| 56   | 7513    | 7593 | 8023 | 8353 | 8632 | 8912 | 9192  | 9472  | 9752  | 10032 |       |
| 57   | 7792    | 7872 | 8302 | 8632 | 8911 | 9191 | 9471  | 9751  | 10031 | 10311 |       |
| 58   | 8071    | 8151 | 8581 | 8911 | 9190 | 9470 | 9750  | 10030 | 10310 | 10590 |       |
| 59   | 8350    | 8430 | 8860 | 9190 | 9469 | 9749 | 10029 | 10309 | 10589 | 10869 |       |
| 1560 | 19 1126 | 1524 | 1814 | 3084 | 3364 | 3644 | 3924  | 4204  | 4484  | 4764  |       |
| 61   | 4843    | 4923 | 5353 | 5683 | 5963 | 6243 | 6523  | 6803  | 7083  | 7363  |       |
| 62   | 5122    | 5202 | 5632 | 5962 | 6242 | 6522 | 6802  | 7082  | 7362  | 7642  |       |
| 63   | 5401    | 5481 | 5911 | 6241 | 6521 | 6801 | 7081  | 7361  | 7641  | 7921  |       |
| 64   | 5680    | 5760 | 6190 | 6520 | 6800 | 7080 | 7360  | 7640  | 7920  | 8200  |       |
| 65   | 5959    | 6039 | 6469 | 6799 | 7079 | 7359 | 7639  | 7919  | 8199  | 8479  |       |
| 66   | 6238    | 6318 | 6748 | 7078 | 7358 | 7638 | 7918  | 8198  | 8478  | 8758  |       |
| 67   | 6517    | 6597 | 7027 | 7357 | 7637 | 7917 | 8197  | 8477  | 8757  | 9037  |       |
| 68   | 6796    | 6876 | 7306 | 7636 | 7916 | 8196 | 8476  | 8756  | 9036  | 9316  |       |
| 69   | 7075    | 7155 | 7585 | 7915 | 8195 | 8475 | 8755  | 9035  | 9315  | 9595  |       |
| 1570 | 19 1135 | 1523 | 1813 | 3083 | 3363 | 3643 | 3923  | 4203  | 4483  | 4763  |       |
| 71   | 4842    | 4922 | 5352 | 5682 | 5962 | 6242 | 6522  | 6802  | 7082  | 7362  |       |
| 72   | 5121    | 5201 | 5631 | 5961 | 6241 | 6521 | 6801  | 7081  | 7361  | 7641  |       |
| 73   | 5400    | 5480 | 5910 | 6240 | 6520 | 6800 | 7080  | 7360  | 7640  | 7920  |       |
| 74   | 5679    | 5759 | 6189 | 6519 | 6799 | 7079 | 7359  | 7639  | 7919  | 8199  |       |
| 75   | 5958    | 6038 | 6468 | 6798 | 7078 | 7358 | 7638  | 7918  | 8198  | 8478  |       |
| 76   | 6237    | 6317 | 6747 | 7077 | 7357 | 7637 | 7917  | 8197  | 8477  | 8757  |       |
| 77   | 6516    | 6596 | 7026 | 7356 | 7636 | 7916 | 8196  | 8476  | 8756  | 9036  |       |
| 78   | 6795    | 6875 | 7305 | 7635 | 7915 | 8195 | 8475  | 8755  | 9035  | 9315  |       |
| 79   | 7074    | 7154 | 7584 | 7914 | 8194 | 8474 | 8754  | 9034  | 9314  | 9594  |       |
| 1580 | 19 1144 | 1522 | 1812 | 3082 | 3362 | 3642 | 3922  | 4202  | 4482  | 4762  |       |
| 81   | 4841    | 4921 | 5351 | 5681 | 5961 | 6241 | 6521  | 6801  | 7081  | 7361  |       |
| 82   | 5120    | 5200 | 5630 | 5960 | 6240 | 6520 | 6800  | 7080  | 7360  | 7640  |       |
| 83   | 5399    | 5479 | 5909 | 6239 | 6519 | 6799 | 7079  | 7359  | 7639  | 7919  |       |
| 84   | 5678    | 5758 | 6188 | 6518 | 6798 | 7078 | 7358  | 7638  | 7918  | 8198  |       |
| 85   | 5957    | 6037 | 6467 | 6797 | 7077 | 7357 | 7637  | 7917  | 8197  | 8477  |       |
| 86   | 6236    | 6316 | 6746 | 7076 | 7356 | 7636 | 7916  | 8196  | 8476  | 8756  |       |
| 87   | 6515    | 6595 | 7025 | 7355 | 7635 | 7915 | 8195  | 8475  | 8755  | 9035  |       |
| 88   | 6794    | 6874 | 7304 | 7634 | 7914 | 8194 | 8474  | 8754  | 9034  | 9314  |       |
| 89   | 7073    | 7153 | 7583 | 7913 | 8193 | 8473 | 8753  | 9033  | 9313  | 9593  |       |
| 1590 | 19 1153 | 1521 | 1811 | 3081 | 3361 | 3641 | 3921  | 4201  | 4481  | 4761  |       |
| 91   | 4840    | 4920 | 5350 | 5680 | 5960 | 6240 | 6520  | 6800  | 7080  | 7360  |       |
| 92   | 5119    | 5199 | 5629 | 5959 | 6239 | 6519 | 6799  | 7079  | 7359  | 7639  |       |
| 93   | 5398    | 5478 | 5908 | 6238 | 6518 | 6798 | 7078  | 7358  | 7638  | 7918  |       |
| 94   | 5677    | 5757 | 6187 | 6517 | 6797 | 7077 | 7357  | 7637  | 7917  | 8197  |       |
| 95   | 5956    | 6036 | 6466 | 6796 | 7076 | 7356 | 7636  | 7916  | 8196  | 8476  |       |
| 96   | 6235    | 6315 | 6745 | 7075 | 7355 | 7635 | 7915  | 8195  | 8475  | 8755  |       |
| 97   | 6514    | 6594 | 7024 | 7354 | 7634 | 7914 | 8194  | 8474  | 8754  | 9034  |       |
| 98   | 6793    | 6873 | 7303 | 7633 | 7913 | 8193 | 8473  | 8753  | 9033  | 9313  |       |
| 99   | 7072    | 7152 | 7582 | 7912 | 8192 | 8472 | 8752  | 9032  | 9312  | 9592  |       |
| 1600 | 19 1162 | 1520 | 1810 | 3080 | 3360 | 3640 | 3920  | 4200  | 4480  | 4760  |       |

1550 = 4 15 10  
 1560 = 4 16 0  
 1570 = 4 17 0  
 1580 = 4 18 0  
 1590 = 4 19 0  
 1600 = 4 20 0

1550 = 5 15 10  
 1560 = 5 16 0  
 1570 = 5 17 0  
 1580 = 5 18 0  
 1590 = 5 19 0  
 1600 = 5 20 0

1550 = 6 15 10  
 1560 = 6 16 0  
 1570 = 6 17 0  
 1580 = 6 18 0  
 1590 = 6 19 0  
 1600 = 6 20 0

1550 = 7 15 10  
 1560 = 7 16 0  
 1570 = 7 17 0  
 1580 = 7 18 0  
 1590 = 7 19 0  
 1600 = 7 20 0

1550 = 8 15 10  
 1560 = 8 16 0  
 1570 = 8 17 0  
 1580 = 8 18 0  
 1590 = 8 19 0  
 1600 = 8 20 0

1550 = 9 15 10  
 1560 = 9 16 0  
 1570 = 9 17 0  
 1580 = 9 18 0  
 1590 = 9 19 0  
 1600 = 9 20 0

1550 = 10 15 10  
 1560 = 10 16 0  
 1570 = 10 17 0  
 1580 = 10 18 0  
 1590 = 10 19 0  
 1600 = 10 20 0

1550 = 11 15 10  
 1560 = 11 16 0  
 1570 = 11 17 0  
 1580 = 11 18 0  
 1590 = 11 19 0  
 1600 = 11 20 0

1550 = 12 15 10  
 1560 = 12 16 0  
 1570 = 12 17 0  
 1580 = 12 18 0  
 1590 = 12 19 0  
 1600 = 12 20 0







| N.  | 0         | 1    | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     | P. P. |       |
|-----|-----------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50  | 217 48 19 | 5101 | 5166  | 5229  | 5292  | 5355  | 5418  | 5482  | 5545  | 5608  |       |       |
| 51  | 2471      | 7714 | 7997  | 8260  | 8523  | 8786  | 9049  | 9312  | 9575  | 9838  | 264   | 263   |
| 52  | 218 00 00 | 0161 | 0216  | 0289  | 1152  | 1415  | 1677  | 1940  | 2203  | 2466  | 1     | 26.4  |
| 53  | 2729      | 2991 | 3254  | 3517  | 3779  | 4042  | 4305  | 4567  | 4830  | 5092  | 2     | 52.8  |
| 54  | 5155      | 5418 | 5681  | 5944  | 6207  | 6469  | 6732  | 7000  | 7263  | 7526  | 3     | 79.2  |
| 55  | 7912      | 8175 | 8438  | 8701  | 8964  | 9227  | 9489  | 9752  | 10015 | 10278 | 4     | 105.6 |
| 56  | 219 06 03 | 0866 | 1128  | 1390  | 1653  | 1914  | 2177  | 2439  | 2701  | 2963  | 5     | 132.0 |
| 57  | 3245      | 3487 | 3749  | 4011  | 4273  | 4535  | 4797  | 5059  | 5321  | 5584  | 6     | 158.4 |
| 58  | 5845      | 6107 | 6369  | 6631  | 6894  | 7156  | 7417  | 7679  | 7940  | 8202  | 7     | 184.8 |
| 59  | 8461      | 8723 | 8985  | 9247  | 9509  | 9771  | 10033 | 10295 | 10557 | 10819 | 8     | 211.2 |
| 60  | 220 10 41 | 1312 | 1604  | 1866  | 2127  | 2389  | 2650  | 2912  | 3173  | 3435  | 9     | 237.6 |
| 61  | 1696      | 1958 | 2219  | 2481  | 2743  | 3004  | 3266  | 3527  | 3788  | 4049  | 1     | 260   |
| 62  | 6410      | 6671 | 6932  | 7193  | 7454  | 7715  | 7976  | 8237  | 8498  | 8759  | 2     | 26.0  |
| 63  | 8922      | 9183 | 9444  | 9705  | 9966  | 10227 | 10488 | 10749 | 11010 | 11271 | 3     | 52.4  |
| 64  | 221 15 41 | 1794 | 2055  | 2316  | 2577  | 2838  | 3099  | 3360  | 3621  | 3882  | 4     | 78.8  |
| 65  | 4141      | 4402 | 4663  | 4924  | 5185  | 5446  | 5707  | 5968  | 6229  | 6490  | 5     | 104.4 |
| 66  | 1270      | 2011 | 2752  | 3493  | 4234  | 4975  | 5716  | 6457  | 7198  | 7939  | 6     | 130.8 |
| 67  | 9156      | 9617 | 10078 | 10539 | 10999 | 11460 | 11921 | 12382 | 12843 | 13304 | 7     | 157.2 |
| 68  | 222 20 61 | 2241 | 2482  | 2723  | 2964  | 3205  | 3446  | 3687  | 3928  | 4169  | 8     | 183.6 |
| 69  | 4564      | 4825 | 5086  | 5347  | 5608  | 5869  | 6130  | 6391  | 6652  | 6913  | 9     | 210.0 |
| 70  | 2105      | 2145 | 2185  | 2225  | 2265  | 2305  | 2345  | 2385  | 2425  | 2465  |       |       |
| 71  | 9261      | 9301 | 9341  | 9381  | 9421  | 9461  | 9501  | 9541  | 9581  | 9621  | 1     | 260   |
| 72  | 223 25 61 | 2302 | 2342  | 2382  | 2422  | 2462  | 2502  | 2542  | 2582  | 2622  | 2     | 26.0  |
| 73  | 4299      | 5200 | 5240  | 5280  | 5320  | 5360  | 5400  | 5440  | 5480  | 5520  | 3     | 52.4  |
| 74  | 2555      | 2816 | 3077  | 3338  | 3599  | 3860  | 4121  | 4382  | 4643  | 4904  | 4     | 78.8  |
| 75  | 224 30 61 | 3107 | 3368  | 3629  | 3890  | 4151  | 4412  | 4673  | 4934  | 5195  | 5     | 104.4 |
| 76  | 2740      | 3299 | 3858  | 4417  | 4976  | 5535  | 6094  | 6653  | 7212  | 7771  | 6     | 130.8 |
| 77  | 5511      | 5590 | 5669  | 5748  | 5827  | 5906  | 5985  | 6064  | 6143  | 6222  | 7     | 157.2 |
| 78  | 7930      | 8009 | 8088  | 8167  | 8246  | 8325  | 8404  | 8483  | 8562  | 8641  | 8     | 183.6 |
| 79  | 225 35 61 | 7966 | 8045  | 8124  | 8203  | 8282  | 8361  | 8440  | 8519  | 8598  | 9     | 210.0 |
| 80  | 3091      | 3151 | 3210  | 3269  | 3328  | 3387  | 3446  | 3505  | 3564  | 3623  |       |       |
| 81  | 8677      | 8736 | 8795  | 8854  | 8913  | 8972  | 9031  | 9090  | 9149  | 9208  | 1     | 260   |
| 82  | 226 40 61 | 8811 | 8870  | 8929  | 8988  | 9047  | 9106  | 9165  | 9224  | 9283  | 2     | 26.0  |
| 83  | 126 08 41 | 1099 | 1157  | 1216  | 1275  | 1334  | 1393  | 1452  | 1511  | 1570  | 3     | 52.4  |
| 84  | 3441      | 3500 | 3559  | 3618  | 3677  | 3736  | 3795  | 3854  | 3913  | 3972  | 4     | 78.8  |
| 85  | 5599      | 5658 | 5717  | 5776  | 5835  | 5894  | 5953  | 6012  | 6071  | 6130  | 5     | 104.4 |
| 86  | 8076      | 8135 | 8194  | 8253  | 8312  | 8371  | 8430  | 8489  | 8548  | 8607  | 6     | 130.8 |
| 87  | 227 45 61 | 8248 | 8307  | 8366  | 8425  | 8484  | 8543  | 8602  | 8661  | 8720  | 7     | 157.2 |
| 88  | 3243      | 3302 | 3361  | 3420  | 3479  | 3538  | 3597  | 3656  | 3715  | 3774  | 8     | 183.6 |
| 89  | 6246      | 6305 | 6364  | 6423  | 6482  | 6541  | 6600  | 6659  | 6718  | 6777  | 9     | 210.0 |
| 90  | 8847      | 9108 | 9369  | 9630  | 9891  | 10152 | 10413 | 10674 | 10935 | 11196 |       |       |
| 91  | 228 50 61 | 1699 | 1758  | 1817  | 1876  | 1935  | 1994  | 2053  | 2112  | 2171  | 1     | 260   |
| 92  | 4041      | 4100 | 4159  | 4218  | 4277  | 4336  | 4395  | 4454  | 4513  | 4572  | 2     | 26.0  |
| 93  | 6520      | 6579 | 6638  | 6697  | 6756  | 6815  | 6874  | 6933  | 6992  | 7051  | 3     | 52.4  |
| 94  | 9111      | 9170 | 9229  | 9288  | 9347  | 9406  | 9465  | 9524  | 9583  | 9642  | 4     | 78.8  |
| 95  | 229 55 61 | 9281 | 9340  | 9399  | 9458  | 9517  | 9576  | 9635  | 9694  | 9753  | 5     | 104.4 |
| 96  | 4254      | 4313 | 4372  | 4431  | 4490  | 4549  | 4608  | 4667  | 4726  | 4785  | 6     | 130.8 |
| 97  | 6818      | 6877 | 6936  | 6995  | 7054  | 7113  | 7172  | 7231  | 7290  | 7349  | 7     | 157.2 |
| 98  | 9172      | 9231 | 9290  | 9349  | 9408  | 9467  | 9526  | 9585  | 9644  | 9703  | 8     | 183.6 |
| 99  | 230 00 61 | 9701 | 9760  | 9819  | 9878  | 9937  | 9996  | 10055 | 10114 | 10173 | 9     | 210.0 |
| 100 | 4459      | 4715 | 5000  | 5285  | 5570  | 5855  | 6140  | 6425  | 6710  | 6995  |       |       |

| N.  | 0         | 1       | 2         | 3       | 4         | 5       | 6         | 7       | 8         | 9       | P. P. |      |
|-----|-----------|---------|-----------|---------|-----------|---------|-----------|---------|-----------|---------|-------|------|
| 101 | 185 00 00 | 4 33 00 | 186 00 00 | 4 33 00 | 187 00 00 | 4 33 00 | 188 00 00 | 4 33 00 | 189 00 00 | 4 33 00 | 1     | 26.0 |
| 102 | 186 00 00 | 4 33 00 | 187 00 00 | 4 33 00 | 188 00 00 | 4 33 00 | 189 00 00 | 4 33 00 | 190 00 00 | 4 33 00 | 2     | 26.0 |
| 103 | 187 00 00 | 4 33 00 | 188 00 00 | 4 33 00 | 189 00 00 | 4 33 00 | 190 00 00 | 4 33 00 | 191 00 00 | 4 33 00 | 3     | 52.4 |
| 104 | 188 00 00 | 4 33 00 | 189 00 00 | 4 33 00 | 190 00 00 | 4 33 00 | 191 00 00 | 4 33 00 | 192 00 00 | 4 33 00 | 4     | 78.8 |











| N.   | 0        | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | P. P. |       |       |
|------|----------|------|------|------|------|------|------|------|------|------|-------|-------|-------|
| 1800 | 255 2725 | 2966 | 3208 | 3449 | 3690 | 3931 | 4172 | 4414 | 4655 | 4896 |       |       |       |
| 01   | 5137     | 5378 | 5619 | 5860 | 6102 | 6343 | 6584 | 6825 | 7066 | 7307 |       |       |       |
| 02   | 7548     | 7789 | 8030 | 8271 | 8512 | 8753 | 8994 | 9235 | 9475 | 9716 |       |       |       |
| 03   | 9957     | 0198 | 0439 | 0680 | 0921 | 1161 | 1402 | 1643 | 1884 | 2125 |       |       |       |
| 04   | 256 2365 | 2606 | 2847 | 3087 | 3328 | 3569 | 3810 | 4050 | 4291 | 4531 | 1     | 24.2  | 24.1  |
| 05   | 4772     | 5013 | 5253 | 5494 | 5734 | 5975 | 6215 | 6456 | 6696 | 6937 | 2     | 48.4  | 48.1  |
| 06   | 7177     | 7418 | 7658 | 7899 | 8139 | 8380 | 8620 | 8860 | 9101 | 9341 | 3     | 72.6  | 72.3  |
| 07   | 9582     | 9822 | 0062 | 0303 | 0543 | 0783 | 1023 | 1264 | 1504 | 1744 | 4     | 96.8  | 96.4  |
| 08   | 257 1984 | 2224 | 2465 | 2705 | 2945 | 3185 | 3425 | 3665 | 3905 | 4146 | 5     | 121.0 | 120.5 |
| 09   | 4386     | 4626 | 4866 | 5106 | 5346 | 5586 | 5826 | 6066 | 6306 | 6546 | 6     | 145.2 | 144.6 |
| 1810 | 6786     | 7026 | 7266 | 7506 | 7745 | 7985 | 8225 | 8465 | 8705 | 8945 | 7     | 169.4 | 168.7 |
| 11   | 9185     | 9424 | 9664 | 9904 | 0144 | 0383 | 0623 | 0863 | 1103 | 1342 | 8     | 193.6 | 192.8 |
| 12   | 258 1582 | 1822 | 2061 | 2301 | 2541 | 2780 | 3020 | 3259 | 3499 | 3738 | 9     | 217.8 | 216.9 |
| 13   | 3978     | 4218 | 4457 | 4697 | 4936 | 5176 | 5415 | 5655 | 5894 | 6133 |       |       |       |
| 14   | 6373     | 6612 | 6852 | 7091 | 7330 | 7570 | 7809 | 8048 | 8288 | 8527 |       |       |       |
| 15   | 8766     | 9006 | 9245 | 9484 | 9723 | 9963 | 0202 | 0441 | 0680 | 0919 |       |       |       |
| 16   | 259 1158 | 1398 | 1637 | 1876 | 2115 | 2354 | 2593 | 2832 | 3071 | 3310 | 1     | 24.0  | 23.9  |
| 17   | 3549     | 3788 | 4027 | 4266 | 4505 | 4744 | 4983 | 5222 | 5461 | 5700 | 2     | 48.0  | 47.8  |
| 18   | 5939     | 6178 | 6417 | 6655 | 6894 | 7133 | 7372 | 7611 | 7849 | 8088 | 3     | 72.0  | 71.7  |
| 19   | 8327     | 8566 | 8804 | 9043 | 9282 | 9521 | 9759 | 9998 | 0237 | 0475 | 4     | 96.0  | 95.6  |
| 1820 | 260 0714 | 0952 | 1191 | 1430 | 1668 | 1907 | 2145 | 2384 | 2622 | 2861 | 5     | 120.0 | 119.5 |
| 21   | 3099     | 3338 | 3576 | 3815 | 4053 | 4292 | 4530 | 4769 | 5007 | 5245 | 6     | 144.0 | 143.4 |
| 22   | 5484     | 5722 | 5960 | 6199 | 6437 | 6675 | 6914 | 7152 | 7390 | 7628 | 7     | 168.0 | 167.3 |
| 23   | 7867     | 8105 | 8343 | 8581 | 8820 | 9058 | 9296 | 9534 | 9772 | 0010 | 8     | 192.0 | 191.1 |
| 24   | 261 0248 | 0486 | 0725 | 0963 | 1201 | 1439 | 1677 | 1915 | 2153 | 2391 | 9     | 216.0 | 215.1 |
| 25   | 2629     | 2867 | 3105 | 3343 | 3580 | 3818 | 4056 | 4294 | 4532 | 4770 |       |       |       |
| 26   | 5008     | 5246 | 5483 | 5721 | 5959 | 6197 | 6435 | 6672 | 6910 | 7148 |       |       |       |
| 27   | 7385     | 7623 | 7861 | 8099 | 8336 | 8574 | 8811 | 9049 | 9287 | 9524 |       |       |       |
| 28   | 9762     | 9999 | 0237 | 0475 | 0712 | 0950 | 1187 | 1425 | 1662 | 1900 | 1     | 238   | 237   |
| 29   | 262 2137 | 2374 | 2612 | 2849 | 3087 | 3324 | 3562 | 3799 | 4036 | 4274 | 2     | 47.6  | 47.4  |
| 1830 | 4511     | 4748 | 4986 | 5223 | 5460 | 5697 | 5935 | 6172 | 6409 | 6646 | 3     | 71.4  | 71.1  |
| 31   | 6883     | 7121 | 7358 | 7595 | 7832 | 8069 | 8306 | 8543 | 8781 | 9018 | 4     | 95.2  | 94.8  |
| 32   | 9255     | 9492 | 9729 | 9966 | 0203 | 0440 | 0677 | 0914 | 1151 | 1388 | 5     | 119.0 | 118.5 |
| 33   | 263 1625 | 1862 | 2098 | 2335 | 2572 | 2809 | 3046 | 3283 | 3520 | 3757 | 6     | 142.8 | 142.1 |
| 34   | 3993     | 4230 | 4467 | 4704 | 4940 | 5177 | 5414 | 5651 | 5887 | 6124 | 7     | 166.6 | 165.9 |
| 35   | 6361     | 6597 | 6834 | 7071 | 7307 | 7544 | 7780 | 8017 | 8254 | 8490 | 8     | 190.4 | 189.6 |
| 36   | 8727     | 8963 | 9200 | 9436 | 9673 | 9909 | 0146 | 0382 | 0619 | 0855 | 9     | 214.2 | 213.3 |
| 37   | 264 1092 | 1328 | 1564 | 1801 | 2037 | 2273 | 2510 | 2746 | 2982 | 3219 |       |       |       |
| 38   | 3455     | 3691 | 3928 | 4164 | 4400 | 4636 | 4873 | 5109 | 5345 | 5581 |       |       |       |
| 39   | 5817     | 6053 | 6290 | 6526 | 6762 | 6998 | 7234 | 7470 | 7706 | 7942 |       |       |       |
| 1840 | 8178     | 8414 | 8650 | 8886 | 9122 | 9358 | 9594 | 9830 | 0066 | 0302 | 1     | 236   | 235   |
| 41   | 265 0538 | 0774 | 1010 | 1246 | 1481 | 1717 | 1953 | 2189 | 2425 | 2660 | 2     | 47.2  | 47.0  |
| 42   | 2896     | 3132 | 3368 | 3604 | 3839 | 4075 | 4311 | 4546 | 4782 | 5018 | 3     | 70.8  | 70.5  |
| 43   | 5253     | 5489 | 5725 | 5960 | 6196 | 6431 | 6667 | 6903 | 7138 | 7374 | 4     | 94.4  | 94.0  |
| 44   | 7609     | 7845 | 8080 | 8316 | 8551 | 8787 | 9022 | 9257 | 9493 | 9728 | 5     | 118.0 | 117.5 |
| 45   | 9964     | 0199 | 0434 | 0670 | 0905 | 1140 | 1376 | 1611 | 1846 | 2082 | 6     | 141.6 | 141.0 |
| 46   | 266 2317 | 2552 | 2787 | 3023 | 3258 | 3493 | 3728 | 3963 | 4199 | 4434 | 7     | 165.2 | 164.5 |
| 47   | 4669     | 4904 | 5139 | 5374 | 5609 | 5844 | 6080 | 6315 | 6550 | 6785 | 8     | 188.8 | 188.0 |
| 48   | 7020     | 7255 | 7490 | 7725 | 7960 | 8195 | 8429 | 8664 | 8899 | 9134 | 9     | 212.4 | 211.5 |
| 49   | 9369     | 9604 | 9839 | 0074 | 0309 | 0543 | 0778 | 1013 | 1248 | 1483 |       |       |       |
| 1850 | 267 1717 | 1952 | 2187 | 2421 | 2656 | 2891 | 3126 | 3360 | 3595 | 3830 |       |       |       |

| N. | 0        | 1        | 2        | 3        | 4        | 5        | 6        | 7        | 8        | 9        | P. P. |  |
|----|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-------|--|
|    | 18000    | 18100    | 18200    | 18300    | 18400    | 18500    | 18600    | 18700    | 18800    | 18900    |       |  |
|    | 5° 0' 0" | 5° 1' 0" | 5° 2' 0" | 5° 3' 0" | 5° 4' 0" | 5° 5' 0" | 5° 6' 0" | 5° 7' 0" | 5° 8' 0" | 5° 9' 0" |       |  |
|    | 18000    | 18100    | 18200    | 18300    | 18400    | 18500    | 18600    | 18700    | 18800    | 18900    |       |  |
|    | 5° 0' 0" | 5° 1' 0" | 5° 2' 0" | 5° 3' 0" | 5° 4' 0" | 5° 5' 0" | 5° 6' 0" | 5° 7' 0" | 5° 8' 0" | 5° 9' 0" |       |  |
|    | 18000    | 18100    | 18200    | 18300    | 18400    | 18500    | 18600    | 18700    | 18800    | 18900    |       |  |
|    | 5° 0' 0" | 5° 1' 0" | 5° 2' 0" | 5° 3' 0" | 5° 4' 0" | 5° 5' 0" | 5° 6' 0" | 5° 7' 0" | 5° 8' 0" | 5° 9' 0" |       |  |

S. 4.685 5694 T. 5859

5693 5860

5692 5861

5691 5862

5690 5863

5689 5864



| N.   | 0        | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     | P. P. |
|------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1850 | 267 1717 | 1952  | 2187  | 2421  | 2656  | 2891  | 3126  | 3360  | 3595  | 3830  |       |
| 51   | 4064     | 4299  | 4533  | 4768  | 5003  | 5237  | 5472  | 5706  | 5941  | 6175  |       |
| 52   | 6410     | 6644  | 6879  | 7113  | 7348  | 7582  | 7817  | 8051  | 8285  | 8519  |       |
| 53   | 8754     | 8989  | 9223  | 9457  | 9692  | 9926  | 10160 | 10394 | 10629 | 10863 |       |
| 54   | 268 1097 | 1332  | 1566  | 1800  | 2034  | 2268  | 2502  | 2737  | 2971  | 3205  | 1     |
| 55   | 3439     | 3673  | 3907  | 4141  | 4375  | 4609  | 4843  | 5078  | 5312  | 5546  | 2     |
| 56   | 5780     | 6014  | 6248  | 6482  | 6716  | 6950  | 7184  | 7417  | 7651  | 7885  | 3     |
| 57   | 8129     | 8363  | 8597  | 8831  | 9065  | 9299  | 9533  | 9767  | 10001 | 10235 | 4     |
| 58   | 269 0457 | 0691  | 0925  | 1159  | 1393  | 1627  | 1861  | 2095  | 2329  | 2563  | 5     |
| 59   | 2794     | 3028  | 3262  | 3496  | 3730  | 3964  | 4198  | 4432  | 4666  | 4900  | 6     |
| 1860 | 5129     | 5363  | 5597  | 5831  | 6065  | 6299  | 6533  | 6767  | 6999  | 7233  | 7     |
| 61   | 7464     | 7697  | 7931  | 8165  | 8399  | 8633  | 8867  | 9101  | 9335  | 9569  | 8     |
| 62   | 9797     | 10031 | 10265 | 10499 | 10733 | 10967 | 11201 | 11435 | 11669 | 11903 | 9     |
| 63   | 270 2129 | 2363  | 2597  | 2831  | 3065  | 3299  | 3533  | 3767  | 3999  | 4233  |       |
| 64   | 4559     | 4793  | 5027  | 5261  | 5495  | 5729  | 5963  | 6197  | 6431  | 6665  |       |
| 65   | 6788     | 7022  | 7256  | 7490  | 7724  | 7958  | 8192  | 8426  | 8660  | 8894  |       |
| 66   | 9116     | 9350  | 9584  | 9818  | 10052 | 10286 | 10520 | 10754 | 10988 | 11222 |       |
| 67   | 271 1443 | 1676  | 1910  | 2144  | 2378  | 2612  | 2846  | 3080  | 3314  | 3548  | 1     |
| 68   | 3769     | 4003  | 4237  | 4471  | 4705  | 4939  | 5173  | 5407  | 5641  | 5875  | 2     |
| 69   | 6091     | 6325  | 6559  | 6793  | 7027  | 7261  | 7495  | 7729  | 7963  | 8197  | 3     |
| 1870 | 8429     | 8663  | 8897  | 9131  | 9365  | 9599  | 9833  | 10067 | 10301 | 10535 | 4     |
| 71   | 272 0748 | 0982  | 1216  | 1450  | 1684  | 1918  | 2152  | 2386  | 2620  | 2854  | 5     |
| 72   | 1058     | 1292  | 1526  | 1760  | 1994  | 2228  | 2462  | 2696  | 2930  | 3164  | 6     |
| 73   | 5278     | 5512  | 5746  | 5980  | 6214  | 6448  | 6682  | 6916  | 7150  | 7384  | 7     |
| 74   | 7696     | 7930  | 8164  | 8398  | 8632  | 8866  | 9100  | 9334  | 9568  | 9802  | 8     |
| 75   | 273 0013 | 0247  | 0481  | 0715  | 0949  | 1183  | 1417  | 1651  | 1885  | 2119  | 9     |
| 76   | 2328     | 2562  | 2796  | 3030  | 3264  | 3498  | 3732  | 3966  | 4200  | 4434  |       |
| 77   | 4643     | 4877  | 5111  | 5345  | 5579  | 5813  | 6047  | 6281  | 6515  | 6749  |       |
| 78   | 6986     | 7220  | 7454  | 7688  | 7922  | 8156  | 8390  | 8624  | 8858  | 9092  |       |
| 79   | 9268     | 9502  | 9736  | 9970  | 10204 | 10438 | 10672 | 10906 | 11140 | 11374 |       |
| 1880 | 274 1578 | 1812  | 2046  | 2280  | 2514  | 2748  | 2982  | 3216  | 3450  | 3684  | 1     |
| 81   | 3888     | 4122  | 4356  | 4590  | 4824  | 5058  | 5292  | 5526  | 5760  | 5994  | 2     |
| 82   | 6196     | 6430  | 6664  | 6898  | 7132  | 7366  | 7600  | 7834  | 8068  | 8302  | 3     |
| 83   | 8503     | 8737  | 8971  | 9205  | 9439  | 9673  | 9907  | 10141 | 10375 | 10609 | 4     |
| 84   | 275 0809 | 1043  | 1277  | 1511  | 1745  | 1979  | 2213  | 2447  | 2681  | 2915  | 5     |
| 85   | 3124     | 3358  | 3592  | 3826  | 4060  | 4294  | 4528  | 4762  | 4996  | 5230  | 6     |
| 86   | 5417     | 5651  | 5885  | 6119  | 6353  | 6587  | 6821  | 7055  | 7289  | 7523  | 7     |
| 87   | 7719     | 7953  | 8187  | 8421  | 8655  | 8889  | 9123  | 9357  | 9591  | 9825  | 8     |
| 88   | 276 0020 | 0254  | 0488  | 0722  | 0956  | 1190  | 1424  | 1658  | 1892  | 2126  | 9     |
| 89   | 2420     | 2654  | 2888  | 3122  | 3356  | 3590  | 3824  | 4058  | 4292  | 4526  |       |
| 1890 | 4618     | 4852  | 5086  | 5320  | 5554  | 5788  | 6022  | 6256  | 6490  | 6724  |       |
| 91   | 6915     | 7149  | 7383  | 7617  | 7851  | 8085  | 8319  | 8553  | 8787  | 9021  | 1     |
| 92   | 9213     | 9447  | 9681  | 9915  | 10149 | 10383 | 10617 | 10851 | 11085 | 11319 | 2     |
| 93   | 277 1506 | 1740  | 1974  | 2208  | 2442  | 2676  | 2910  | 3144  | 3378  | 3612  | 3     |
| 94   | 3800     | 4034  | 4268  | 4502  | 4736  | 4970  | 5204  | 5438  | 5672  | 5906  | 4     |
| 95   | 6092     | 6326  | 6560  | 6794  | 7028  | 7262  | 7496  | 7730  | 7964  | 8198  | 5     |
| 96   | 8183     | 8417  | 8651  | 8885  | 9119  | 9353  | 9587  | 9821  | 10055 | 10289 | 6     |
| 97   | 278 0673 | 0907  | 1141  | 1375  | 1609  | 1843  | 2077  | 2311  | 2545  | 2779  | 7     |
| 98   | 2962     | 3196  | 3430  | 3664  | 3898  | 4132  | 4366  | 4600  | 4834  | 5068  | 8     |
| 99   | 5150     | 5384  | 5618  | 5852  | 6086  | 6320  | 6554  | 6788  | 7022  | 7256  | 9     |
| 1900 | 7136     | 7370  | 7604  | 7838  | 8072  | 8306  | 8540  | 8774  | 9008  | 9242  |       |

| N.    | 0 | 1  | 2  | 3 | 4 | 5 | 6 | 7 | 8 | 9 | P. P. |
|-------|---|----|----|---|---|---|---|---|---|---|-------|
| 18500 | 5 | 11 | 20 |   |   |   |   |   |   |   |       |
| 18600 | 5 | 10 | 0  |   |   |   |   |   |   |   |       |
| 18700 | 5 | 11 | 40 |   |   |   |   |   |   |   |       |
| 18800 | 5 | 11 | 20 |   |   |   |   |   |   |   |       |
| 18900 | 5 | 15 | 0  |   |   |   |   |   |   |   |       |
| 18500 | 5 | 11 | 20 |   |   |   |   |   |   |   |       |
| 18600 | 5 | 10 | 0  |   |   |   |   |   |   |   |       |
| 18700 | 5 | 11 | 40 |   |   |   |   |   |   |   |       |
| 18800 | 5 | 11 | 20 |   |   |   |   |   |   |   |       |
| 18900 | 5 | 15 | 0  |   |   |   |   |   |   |   |       |



[illegible]







[illegible]



| N.   | 0        | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | P. P. |       |
|------|----------|------|------|------|------|------|------|------|------|------|-------|-------|
| 2050 | 311 7539 | 7750 | 7962 | 8174 | 8386 | 8598 | 8810 | 9021 | 9233 | 9445 |       |       |
| 51   | 9657     | 9868 | 0080 | 0292 | 0504 | 0715 | 0927 | 1139 | 1350 | 1562 |       |       |
| 52   | 312 1774 | 1985 | 2197 | 2408 | 2620 | 2832 | 3043 | 3255 | 3466 | 3678 |       |       |
| 53   | 3889     | 4101 | 4313 | 4524 | 4736 | 4947 | 5159 | 5370 | 5581 | 5793 |       |       |
| 54   | 6004     | 6216 | 6427 | 6639 | 6850 | 7061 | 7273 | 7484 | 7696 | 7907 | 1     | 212   |
| 55   | 8118     | 8330 | 8541 | 8752 | 8964 | 9175 | 9386 | 9597 | 9809 | 0020 | 2     | 21.2  |
| 56   | 313 0231 | 0442 | 0654 | 0865 | 1076 | 1287 | 1498 | 1709 | 1921 | 2132 | 3     | 63.6  |
| 57   | 2343     | 2554 | 2765 | 2976 | 3187 | 3398 | 3610 | 3821 | 4032 | 4243 | 4     | 84.8  |
| 58   | 4454     | 4665 | 4876 | 5087 | 5298 | 5509 | 5720 | 5931 | 6142 | 6353 | 5     | 106.0 |
| 59   | 6563     | 6774 | 6985 | 7196 | 7407 | 7618 | 7829 | 8040 | 8251 | 8461 | 6     | 127.2 |
|      |          |      |      |      |      |      |      |      |      |      | 7     | 148.4 |
|      |          |      |      |      |      |      |      |      |      |      | 8     | 169.6 |
|      |          |      |      |      |      |      |      |      |      |      | 9     | 190.8 |
| 2060 | 8672     | 8883 | 9094 | 9305 | 9515 | 9726 | 9937 | 0148 | 0358 | 0569 |       |       |
| 61   | 314 0780 | 0991 | 1201 | 1412 | 1623 | 1833 | 2044 | 2255 | 2465 | 2676 |       |       |
| 62   | 2887     | 3097 | 3308 | 3518 | 3729 | 3940 | 4150 | 4361 | 4571 | 4782 |       |       |
| 63   | 4992     | 5203 | 5413 | 5624 | 5834 | 6045 | 6255 | 6466 | 6676 | 6887 |       |       |
| 64   | 7097     | 7307 | 7518 | 7728 | 7939 | 8149 | 8359 | 8570 | 8780 | 8990 |       |       |
| 65   | 9201     | 9411 | 9621 | 9831 | 0042 | 0252 | 0462 | 0672 | 0883 | 0993 | 1     | 211   |
| 66   | 315 1303 | 1513 | 1724 | 1934 | 2144 | 2354 | 2564 | 2774 | 2985 | 3195 | 2     | 210   |
| 67   | 3405     | 3615 | 3825 | 4035 | 4245 | 4455 | 4665 | 4875 | 5085 | 5295 | 3     | 42.2  |
| 68   | 5505     | 5715 | 5925 | 6135 | 6345 | 6555 | 6765 | 6975 | 7185 | 7395 | 4     | 63.3  |
| 69   | 7605     | 7815 | 8025 | 8235 | 8444 | 8654 | 8864 | 9074 | 9284 | 9494 | 5     | 84.4  |
|      |          |      |      |      |      |      |      |      |      |      | 6     | 105.5 |
|      |          |      |      |      |      |      |      |      |      |      | 7     | 126.6 |
|      |          |      |      |      |      |      |      |      |      |      | 8     | 147.7 |
|      |          |      |      |      |      |      |      |      |      |      | 9     | 168.8 |
| 2070 | 9703     | 9913 | 0123 | 0333 | 0543 | 0752 | 0962 | 1172 | 1382 | 1591 |       |       |
| 71   | 316 1801 | 2011 | 2220 | 2430 | 2640 | 2849 | 3059 | 3269 | 3478 | 3688 |       |       |
| 72   | 3898     | 4107 | 4317 | 4526 | 4736 | 4945 | 5155 | 5364 | 5574 | 5784 |       |       |
| 73   | 5993     | 6203 | 6412 | 6621 | 6831 | 7040 | 7250 | 7459 | 7669 | 7878 |       |       |
| 74   | 8088     | 8297 | 8506 | 8716 | 8925 | 9134 | 9344 | 9553 | 9762 | 9972 |       |       |
| 75   | 317 0181 | 0390 | 0600 | 0809 | 1018 | 1227 | 1437 | 1646 | 1855 | 2064 |       |       |
| 76   | 2273     | 2483 | 2692 | 2901 | 3110 | 3319 | 3528 | 3738 | 3947 | 4156 |       |       |
| 77   | 4365     | 4574 | 4783 | 4992 | 5201 | 5410 | 5619 | 5828 | 6037 | 6246 | 1     | 209   |
| 78   | 6455     | 6664 | 6873 | 7082 | 7291 | 7500 | 7709 | 7918 | 8127 | 8336 | 2     | 208   |
| 79   | 8545     | 8754 | 8963 | 9172 | 9380 | 9589 | 9798 | 0007 | 0216 | 0425 | 3     | 41.8  |
|      |          |      |      |      |      |      |      |      |      |      | 4     | 62.7  |
|      |          |      |      |      |      |      |      |      |      |      | 5     | 83.6  |
|      |          |      |      |      |      |      |      |      |      |      | 6     | 104.5 |
|      |          |      |      |      |      |      |      |      |      |      | 7     | 125.4 |
|      |          |      |      |      |      |      |      |      |      |      | 8     | 146.3 |
|      |          |      |      |      |      |      |      |      |      |      | 9     | 167.2 |
| 2080 | 318 0633 | 0842 | 1051 | 1260 | 1468 | 1677 | 1886 | 2095 | 2303 | 2512 |       |       |
| 81   | 2721     | 2929 | 3138 | 3347 | 3556 | 3764 | 3973 | 4181 | 4390 | 4599 |       |       |
| 82   | 4807     | 5016 | 5224 | 5433 | 5642 | 5850 | 6059 | 6267 | 6476 | 6684 |       |       |
| 83   | 6893     | 7101 | 7310 | 7518 | 7727 | 7935 | 8143 | 8352 | 8560 | 8769 |       |       |
| 84   | 8977     | 9186 | 9394 | 9602 | 9811 | 0019 | 0227 | 0436 | 0644 | 0852 |       |       |
| 85   | 319 1061 | 1269 | 1477 | 1685 | 1894 | 2102 | 2310 | 2518 | 2727 | 2935 |       |       |
| 86   | 3143     | 3351 | 3559 | 3768 | 3976 | 4184 | 4392 | 4600 | 4808 | 5016 |       |       |
| 87   | 5224     | 5433 | 5641 | 5849 | 6057 | 6265 | 6473 | 6681 | 6889 | 7097 |       |       |
| 88   | 7305     | 7513 | 7721 | 7929 | 8137 | 8345 | 8553 | 8761 | 8969 | 9176 |       |       |
| 89   | 9384     | 9592 | 9800 | 0008 | 0216 | 0424 | 0632 | 0839 | 1047 | 1255 |       |       |
|      |          |      |      |      |      |      |      |      |      |      | 1     | 207   |
|      |          |      |      |      |      |      |      |      |      |      | 2     | 206   |
|      |          |      |      |      |      |      |      |      |      |      | 3     | 41.4  |
|      |          |      |      |      |      |      |      |      |      |      | 4     | 61.8  |
|      |          |      |      |      |      |      |      |      |      |      | 5     | 82.4  |
|      |          |      |      |      |      |      |      |      |      |      | 6     | 103.0 |
|      |          |      |      |      |      |      |      |      |      |      | 7     | 123.6 |
|      |          |      |      |      |      |      |      |      |      |      | 8     | 144.2 |
|      |          |      |      |      |      |      |      |      |      |      | 9     | 164.8 |
|      |          |      |      |      |      |      |      |      |      |      |       | 185.4 |
| 2090 | 320 1463 | 1671 | 1878 | 2086 | 2294 | 2502 | 2709 | 2917 | 3125 | 3333 |       |       |
| 91   | 3540     | 3748 | 3956 | 4163 | 4371 | 4579 | 4786 | 4994 | 5202 | 5409 |       |       |
| 92   | 5617     | 5824 | 6032 | 6240 | 6447 | 6655 | 6862 | 7070 | 7277 | 7485 |       |       |
| 93   | 7692     | 7900 | 8107 | 8315 | 8522 | 8730 | 8937 | 9145 | 9352 | 9559 |       |       |
| 94   | 9767     | 9974 | 0182 | 0389 | 0596 | 0804 | 1011 | 1218 | 1426 | 1633 |       |       |
| 95   | 321 1840 | 2048 | 2255 | 2462 | 2669 | 2877 | 3084 | 3291 | 3498 | 3706 |       |       |
| 96   | 3913     | 4120 | 4327 | 4534 | 4742 | 4949 | 5156 | 5363 | 5570 | 5777 |       |       |
| 97   | 5984     | 6191 | 6398 | 6606 | 6813 | 7020 | 7227 | 7434 | 7641 | 7848 |       |       |
| 98   | 8055     | 8262 | 8469 | 8676 | 8883 | 9090 | 9297 | 9504 | 9711 | 9917 |       |       |
| 99   | 322 0124 | 0331 | 0538 | 0745 | 0952 | 1159 | 1366 | 1572 | 1779 | 1986 |       |       |
| 2100 | 2193     | 2400 | 2607 | 2813 | 3020 | 3227 | 3434 | 3640 | 3847 | 4054 |       |       |

| N. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | P. P. |  |
|----|---|---|---|---|---|---|---|---|---|---|-------|--|
|----|---|---|---|---|---|---|---|---|---|---|-------|--|

20500" = 5° 41' 40"      2050" = 0° 34' 10"      S. 4.685 5677      T. 5892

20600" = 5 43 20      2060" = 0 34 20      5676      5893

20700" = 5 45 0      2070" = 0 34 30      5676      5894

20800" = 5 46 40      2080" = 0 34 40      5675      5896

20900" = 5 48 20      2090" = 0 34 50      5674      5897



| N.    | 0        | 1      | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     | P. P. |
|-------|----------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 2100  | 321 2193 | 2450   | 2607  | 2811  | 3020  | 3232  | 3444  | 3657  | 3870  | 4082  |       |
| 01    | 4261     | 4407   | 4674  | 4881  | 5085  | 5294  | 5504  | 5714  | 5924  | 6134  |       |
| 02    | 6327     | 6534   | 6740  | 6947  | 7153  | 7360  | 7567  | 7774  | 7981  | 8188  |       |
| 03    | 8393     | 8599   | 8806  | 9012  | 9219  | 9426  | 9633  | 9840  | 10047 | 10254 |       |
| 04    | 323 0157 | 6664   | 6870  | 7077  | 7284  | 7491  | 7698  | 7905  | 8112  | 8319  |       |
| 05    | 2521     | 2727   | 2934  | 3140  | 3346  | 3553  | 3760  | 3967  | 4174  | 4381  |       |
| 06    | 4584     | 4790   | 4996  | 5203  | 5410  | 5617  | 5824  | 6031  | 6238  | 6445  |       |
| 07    | 6615     | 6851   | 7058  | 7264  | 7471  | 7678  | 7885  | 8092  | 8299  | 8506  |       |
| 08    | 8706     | 8912   | 9118  | 9325  | 9531  | 9738  | 9945  | 10152 | 10359 | 10566 |       |
| 09    | 321 0706 | 0972   | 1178  | 1384  | 1591  | 1797  | 1904  | 2011  | 2118  | 2225  |       |
| 2110  | 2825     | 3030   | 3236  | 3442  | 3648  | 3854  | 4060  | 4266  | 4472  | 4678  |       |
| 11    | 4884     | 5088   | 5291  | 5497  | 5703  | 5909  | 6115  | 6321  | 6527  | 6733  |       |
| 12    | 6939     | 7145   | 7351  | 7557  | 7763  | 7969  | 8175  | 8381  | 8587  | 8793  |       |
| 13    | 8995     | 9201   | 9407  | 9613  | 9819  | 10025 | 10231 | 10437 | 10643 | 10849 |       |
| 14    | 325 1050 | 1255   | 1461  | 1666  | 1872  | 2078  | 2284  | 2490  | 2696  | 2902  |       |
| 15    | 3104     | 3309   | 3514  | 3720  | 3925  | 4131  | 4337  | 4543  | 4749  | 4955  |       |
| 16    | 5157     | 5362   | 5567  | 5773  | 5978  | 6184  | 6390  | 6596  | 6802  | 7008  |       |
| 17    | 7209     | 7414   | 7619  | 7824  | 8030  | 8236  | 8442  | 8648  | 8854  | 9060  |       |
| 18    | 9260     | 9465   | 9670  | 9876  | 10082 | 10288 | 10494 | 10699 | 10905 | 11111 |       |
| 19    | 326 1310 | 1515   | 1719  | 1924  | 2129  | 2335  | 2540  | 2746  | 2951  | 3157  |       |
| 2120  | 3359     | 3563   | 3768  | 3973  | 4178  | 4383  | 4588  | 4793  | 4998  | 5203  |       |
| 21    | 5407     | 5611   | 5816  | 6021  | 6226  | 6431  | 6636  | 6841  | 7046  | 7251  |       |
| 22    | 7454     | 7658   | 7863  | 8068  | 8273  | 8478  | 8683  | 8888  | 9093  | 9298  |       |
| 23    | 9500     | 9705   | 9909  | 10114 | 10319 | 10524 | 10729 | 10934 | 11139 | 11344 |       |
| 24    | 327 1545 | 1750   | 1954  | 2159  | 2364  | 2569  | 2774  | 2979  | 3184  | 3389  |       |
| 25    | 3589     | 3794   | 3998  | 4203  | 4408  | 4613  | 4818  | 5023  | 5228  | 5433  |       |
| 26    | 5633     | 5837   | 6041  | 6246  | 6451  | 6656  | 6861  | 7066  | 7271  | 7476  |       |
| 27    | 7675     | 7879   | 8083  | 8287  | 8492  | 8697  | 8902  | 9107  | 9312  | 9517  |       |
| 28    | 9716     | 9920   | 10124 | 10328 | 10533 | 10737 | 10942 | 11146 | 11351 | 11556 |       |
| 29    | 328 1757 | 1961   | 2165  | 2369  | 2573  | 2778  | 2982  | 3187  | 3391  | 3596  |       |
| 2130  | 3796     | 4000   | 4204  | 4408  | 4612  | 4817  | 5021  | 5226  | 5430  | 5635  |       |
| 31    | 5834     | 6038   | 6242  | 6446  | 6650  | 6854  | 7059  | 7263  | 7467  | 7672  |       |
| 32    | 7872     | 8076   | 8279  | 8483  | 8687  | 8891  | 9095  | 9299  | 9503  | 9708  |       |
| 33    | 9909     | 10112  | 10316 | 10519 | 10723 | 10927 | 11131 | 11335 | 11539 | 11743 |       |
| 34    | 329 1944 | 2148   | 2351  | 2555  | 2758  | 2962  | 3165  | 3369  | 3572  | 3776  |       |
| 35    | 3979     | 4182   | 4386  | 4589  | 4792  | 4996  | 5199  | 5402  | 5606  | 5809  |       |
| 36    | 6012     | 6216   | 6419  | 6622  | 6826  | 7029  | 7232  | 7435  | 7638  | 7841  |       |
| 37    | 8045     | 8248   | 8451  | 8655  | 8858  | 9061  | 9264  | 9467  | 9670  | 9873  |       |
| 38    | 330 0707 | 0910   | 1113  | 1316  | 1519  | 1722  | 1925  | 2128  | 2331  | 2534  |       |
| 39    | 2108     | 2311   | 2514  | 2717  | 2920  | 3123  | 3326  | 3529  | 3732  | 3935  |       |
| 2140  | 4138     | 4341   | 4544  | 4747  | 4950  | 5152  | 5355  | 5558  | 5761  | 5964  |       |
| 41    | 6167     | 6370   | 6572  | 6775  | 6978  | 7180  | 7383  | 7586  | 7789  | 7992  |       |
| 42    | 8195     | 8397   | 8600  | 8803  | 9006  | 9209  | 9412  | 9615  | 9818  | 10021 |       |
| 43    | 331 0212 | 0414   | 0617  | 0819  | 1022  | 1225  | 1428  | 1631  | 1834  | 2037  |       |
| 44    | 2248     | 2452   | 2655  | 2858  | 3061  | 3264  | 3467  | 3670  | 3873  | 4076  |       |
| 45    | 4273     | 4475   | 4678  | 4880  | 5083  | 5286  | 5489  | 5692  | 5895  | 6098  |       |
| 46    | 6297     | 6500   | 6703  | 6906  | 7109  | 7312  | 7515  | 7718  | 7921  | 8124  |       |
| 47    | 8310     | 8523   | 8725  | 8927  | 9129  | 9332  | 9535  | 9738  | 9941  | 10144 |       |
| 48    | 332 0343 | 0545   | 0747  | 0949  | 1151  | 1354  | 1557  | 1760  | 1963  | 2166  |       |
| 49    | 2361     | 2566   | 2768  | 2972  | 3175  | 3378  | 3581  | 3784  | 3987  | 4190  |       |
| 2150  | 4385     | 4587   | 4789  | 4991  | 5193  | 5396  | 5598  | 5801  | 6004  | 6207  |       |
| N.    | 0        | 1      | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     | P. P. |
| 21000 | 00       | 5' 50" | 0'    |       |       |       |       |       |       |       |       |
| 21100 | 00       | 5' 51" | 40    |       |       |       |       |       |       |       |       |
| 21200 | 00       | 5' 53" | 30    |       |       |       |       |       |       |       |       |
| 21300 | 00       | 5' 55" | 0     |       |       |       |       |       |       |       |       |
| 21400 | 00       | 5' 56" | 40    |       |       |       |       |       |       |       |       |



| N.   | 0       | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     | P. P.   |
|------|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------|
| 2150 | 3324385 | 3587  | 4789  | 4991  | 5191  | 5491  | 5896  | 5993  | 6000  | 6202  |         |
| 51   | 6041    | 6646  | 6848  | 7010  | 7212  | 7414  | 7616  | 7817  | 8000  | 8211  |         |
| 52   | 8413    | 8615  | 8816  | 9018  | 9219  | 9419  | 9619  | 9819  | 10000 | 10211 |         |
| 53   | 11212   | 11413 | 11614 | 11815 | 12016 | 12217 | 12418 | 12619 | 12819 | 13020 |         |
| 54   | 3457    | 2659  | 2860  | 3062  | 3263  | 3465  | 3667  | 3868  | 4069  | 4271  |         |
| 55   | 4472    | 4673  | 4874  | 5075  | 5276  | 5477  | 5678  | 5879  | 6080  | 6281  |         |
| 56   | 6488    | 6689  | 6890  | 7091  | 7292  | 7493  | 7694  | 7895  | 8096  | 8297  |         |
| 57   | 8501    | 8702  | 8903  | 9104  | 9305  | 9506  | 9707  | 9908  | 10109 | 10310 |         |
| 58   | 11311   | 11512 | 11713 | 11914 | 12115 | 12316 | 12517 | 12718 | 12919 | 13120 |         |
| 59   | 2526    | 2727  | 2928  | 3129  | 3330  | 3531  | 3732  | 3933  | 4134  | 4335  |         |
| 2160 | 4536    | 4737  | 4938  | 5139  | 5340  | 5541  | 5742  | 5943  | 6144  | 6345  |         |
| 61   | 6546    | 6747  | 6948  | 7149  | 7350  | 7551  | 7752  | 7953  | 8154  | 8355  |         |
| 62   | 8556    | 8757  | 8958  | 9159  | 9360  | 9561  | 9762  | 9963  | 10164 | 10365 |         |
| 63   | 11366   | 11567 | 11768 | 11969 | 12170 | 12371 | 12572 | 12773 | 12974 | 13175 |         |
| 64   | 3573    | 3774  | 3975  | 4176  | 4377  | 4578  | 4779  | 4980  | 5181  | 5382  |         |
| 65   | 4579    | 4780  | 4981  | 5182  | 5383  | 5584  | 5785  | 5986  | 6187  | 6388  |         |
| 66   | 6589    | 6790  | 6991  | 7192  | 7393  | 7594  | 7795  | 7996  | 8197  | 8398  |         |
| 67   | 8599    | 8800  | 9001  | 9202  | 9403  | 9604  | 9805  | 10006 | 10207 | 10408 |         |
| 68   | 11609   | 11810 | 12011 | 12212 | 12413 | 12614 | 12815 | 13016 | 13217 | 13418 |         |
| 69   | 2590    | 2791  | 2992  | 3193  | 3394  | 3595  | 3796  | 3997  | 4198  | 4399  |         |
| 2170 | 4599    | 4800  | 5001  | 5202  | 5403  | 5604  | 5805  | 6006  | 6207  | 6408  |         |
| 71   | 6609    | 6810  | 7011  | 7212  | 7413  | 7614  | 7815  | 8016  | 8217  | 8418  |         |
| 72   | 8619    | 8820  | 9021  | 9222  | 9423  | 9624  | 9825  | 10026 | 10227 | 10428 |         |
| 73   | 11629   | 11830 | 12031 | 12232 | 12433 | 12634 | 12835 | 13036 | 13237 | 13438 |         |
| 74   | 3639    | 3840  | 4041  | 4242  | 4443  | 4644  | 4845  | 5046  | 5247  | 5448  |         |
| 75   | 5649    | 5850  | 6051  | 6252  | 6453  | 6654  | 6855  | 7056  | 7257  | 7458  |         |
| 76   | 7659    | 7860  | 8061  | 8262  | 8463  | 8664  | 8865  | 9066  | 9267  | 9468  |         |
| 77   | 9669    | 9870  | 10071 | 10272 | 10473 | 10674 | 10875 | 11076 | 11277 | 11478 |         |
| 78   | 11679   | 11880 | 12081 | 12282 | 12483 | 12684 | 12885 | 13086 | 13287 | 13488 |         |
| 79   | 2689    | 2890  | 3091  | 3292  | 3493  | 3694  | 3895  | 4096  | 4297  | 4498  |         |
| 2180 | 4599    | 4800  | 5001  | 5202  | 5403  | 5604  | 5805  | 6006  | 6207  | 6408  |         |
| 81   | 6609    | 6810  | 7011  | 7212  | 7413  | 7614  | 7815  | 8016  | 8217  | 8418  |         |
| 82   | 8619    | 8820  | 9021  | 9222  | 9423  | 9624  | 9825  | 10026 | 10227 | 10428 |         |
| 83   | 11629   | 11830 | 12031 | 12232 | 12433 | 12634 | 12835 | 13036 | 13237 | 13438 |         |
| 84   | 3639    | 3840  | 4041  | 4242  | 4443  | 4644  | 4845  | 5046  | 5247  | 5448  |         |
| 85   | 5649    | 5850  | 6051  | 6252  | 6453  | 6654  | 6855  | 7056  | 7257  | 7458  |         |
| 86   | 7659    | 7860  | 8061  | 8262  | 8463  | 8664  | 8865  | 9066  | 9267  | 9468  |         |
| 87   | 9669    | 9870  | 10071 | 10272 | 10473 | 10674 | 10875 | 11076 | 11277 | 11478 |         |
| 88   | 11679   | 11880 | 12081 | 12282 | 12483 | 12684 | 12885 | 13086 | 13287 | 13488 |         |
| 89   | 2689    | 2890  | 3091  | 3292  | 3493  | 3694  | 3895  | 4096  | 4297  | 4498  |         |
| 2190 | 4599    | 4800  | 5001  | 5202  | 5403  | 5604  | 5805  | 6006  | 6207  | 6408  |         |
| N.   | 0       | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     | P. P.   |
| 1150 | 0       | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     | T. 1964 |
| 1160 | 0       | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     | 1967    |
| 1170 | 0       | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     | 1969    |
| 1180 | 0       | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     | 1970    |
| 1190 | 0       | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     | 1971    |











| N.    | 0        | 1          | 2     | 3     | 4       | 5          | 6     | 7     | 8        | 9       | P. P. |
|-------|----------|------------|-------|-------|---------|------------|-------|-------|----------|---------|-------|
| 2300  | 361 7278 | 7467       | 7656  | 7845  | 8034    | 8222       | 8411  | 8600  | 8789     | 8978    |       |
| 01    | 9166     | 9355       | 9544  | 9732  | 9921    | 10110      | 10298 | 10487 | 10676    | 10865   |       |
| 02    | 362 1053 | 1242       | 1430  | 1619  | 1808    | 1996       | 2185  | 2373  | 2562     | 2751    |       |
| 03    | 2939     | 3128       | 3317  | 3505  | 3694    | 3882       | 4071  | 4259  | 4448     | 4636    |       |
| 04    | 4825     | 5013       | 5202  | 5390  | 5579    | 5767       | 5956  | 6144  | 6332     | 6521    |       |
| 05    | 6709     | 6898       | 7086  | 7275  | 7464    | 7652       | 7841  | 8029  | 8218     | 8406    |       |
| 06    | 8593     | 8781       | 8970  | 9158  | 9346    | 9535       | 9723  | 9911  | 10099    | 10288   |       |
| 07    | 363 0476 | 0664       | 0852  | 1041  | 1229    | 1417       | 1605  | 1793  | 1982     | 2170    | 1000  |
| 08    | 2358     | 2546       | 2734  | 2923  | 3111    | 3299       | 3487  | 3675  | 3864     | 4052    | 1000  |
| 09    | 4239     | 4427       | 4615  | 4803  | 4992    | 5180       | 5368  | 5556  | 5744     | 5932    | 1000  |
| 2310  | 6120     | 6308       | 6496  | 6684  | 6872    | 7060       | 7248  | 7436  | 7624     | 7812    |       |
| 11    | 7999     | 8187       | 8375  | 8563  | 8751    | 8939       | 9127  | 9315  | 9503     | 9691    |       |
| 12    | 9878     | 10066      | 10254 | 10442 | 10630   | 10817      | 11005 | 11193 | 11381    | 11569   |       |
| 13    | 364 1756 | 1944       | 2132  | 2320  | 2507    | 2695       | 2883  | 3071  | 3259     | 3447    |       |
| 14    | 3654     | 3842       | 4030  | 4217  | 4405    | 4593       | 4781  | 4969  | 5157     | 5345    |       |
| 15    | 5510     | 5698       | 5885  | 6073  | 6260    | 6448       | 6636  | 6824  | 7012     | 7200    |       |
| 16    | 7386     | 7573       | 7761  | 7948  | 8136    | 8324       | 8512  | 8699  | 8887     | 9075    |       |
| 17    | 9260     | 9448       | 9635  | 9823  | 10010   | 10197      | 10385 | 10572 | 10760    | 10948   |       |
| 18    | 365 1134 | 1322       | 1509  | 1696  | 1884    | 2071       | 2258  | 2446  | 2634     | 2821    |       |
| 19    | 3007     | 3195       | 3382  | 3569  | 3757    | 3944       | 4131  | 4318  | 4506     | 4693    |       |
| 2320  | 4880     | 5067       | 5254  | 5441  | 5628    | 5816       | 6003  | 6190  | 6377     | 6564    |       |
| 21    | 6751     | 6939       | 7126  | 7313  | 7500    | 7687       | 7874  | 8061  | 8248     | 8435    |       |
| 22    | 8622     | 8809       | 8996  | 9183  | 9370    | 9557       | 9744  | 9931  | 10118    | 10305   |       |
| 23    | 366 0492 | 0679       | 0866  | 1053  | 1240    | 1427       | 1614  | 1801  | 1988     | 2175    |       |
| 24    | 2361     | 2548       | 2735  | 2922  | 3109    | 3296       | 3483  | 3670  | 3857     | 4044    |       |
| 25    | 4230     | 4416       | 4603  | 4790  | 4977    | 5164       | 5351  | 5538  | 5725     | 5912    |       |
| 26    | 6097     | 6284       | 6471  | 6657  | 6844    | 7031       | 7217  | 7404  | 7591     | 7778    |       |
| 27    | 9664     | 9850       | 10037 | 10224 | 10410   | 10597      | 10784 | 10970 | 11157    | 11344   |       |
| 28    | 9830     | 10016      | 10203 | 10389 | 10576   | 10762      | 10949 | 11135 | 11322    | 11509   |       |
| 29    | 367 1695 | 1881       | 2068  | 2254  | 2441    | 2627       | 2814  | 2999  | 3186     | 3373    |       |
| 2330  | 3559     | 3746       | 3932  | 4118  | 4305    | 4491       | 4677  | 4864  | 5050     | 5237    |       |
| 31    | 5423     | 5609       | 5795  | 5982  | 6168    | 6354       | 6540  | 6727  | 6913     | 7099    |       |
| 32    | 7285     | 7472       | 7658  | 7844  | 8030    | 8217       | 8403  | 8589  | 8775     | 8961    |       |
| 33    | 9147     | 9334       | 9520  | 9706  | 9892    | 10078      | 10264 | 10450 | 10636    | 10822   |       |
| 34    | 368 1009 | 1195       | 1381  | 1567  | 1753    | 1939       | 2125  | 2311  | 2497     | 2683    |       |
| 35    | 2866     | 3052       | 3238  | 3424  | 3610    | 3796       | 3982  | 4168  | 4354     | 4540    |       |
| 36    | 4726     | 4912       | 5100  | 5286  | 5472    | 5658       | 5844  | 6030  | 6216     | 6402    |       |
| 37    | 6587     | 6773       | 6959  | 7145  | 7330    | 7516       | 7702  | 7888  | 8074     | 8260    |       |
| 38    | 8445     | 8631       | 8817  | 9002  | 9188    | 9374       | 9559  | 9745  | 9931     | 10117   |       |
| 39    | 369 0302 | 0488       | 0674  | 0859  | 1045    | 1230       | 1416  | 1602  | 1787     | 1973    |       |
| 2340  | 2159     | 2344       | 2530  | 2715  | 2901    | 3086       | 3272  | 3458  | 3644     | 3830    |       |
| 41    | 4014     | 4200       | 4385  | 4571  | 4756    | 4942       | 5127  | 5313  | 5498     | 5684    |       |
| 42    | 5869     | 6054       | 6240  | 6425  | 6611    | 6796       | 6981  | 7167  | 7352     | 7537    |       |
| 43    | 7723     | 7908       | 8093  | 8279  | 8464    | 8650       | 8835  | 9020  | 9206     | 9391    |       |
| 44    | 9576     | 9761       | 9947  | 10132 | 10317   | 10502      | 10688 | 10873 | 11058    | 11244   |       |
| 45    | 370 1428 | 1614       | 1799  | 1984  | 2169    | 2354       | 2540  | 2725  | 2910     | 3095    |       |
| 46    | 3280     | 3465       | 3650  | 3835  | 4020    | 4206       | 4391  | 4576  | 4761     | 4946    |       |
| 47    | 5131     | 5316       | 5501  | 5686  | 5871    | 6056       | 6241  | 6426  | 6611     | 6796    |       |
| 48    | 6981     | 7166       | 7351  | 7536  | 7721    | 7906       | 8091  | 8276  | 8461     | 8646    |       |
| 49    | 8830     | 9015       | 9200  | 9385  | 9570    | 9754       | 9939  | 10124 | 10309    | 10494   |       |
| 2350  | 371 0679 | 0863       | 1048  | 1233  | 1418    | 1603       | 1787  | 1972  | 2157     | 2342    |       |
| N.    | 0        | 1          | 2     | 3     | 4       | 5          | 6     | 7     | 8        | 9       | P. P. |
| 23000 | =        | 6° 23' 20" |       |       | 2300' = | 6° 38' 20" |       |       | N. 4.685 | 3659 T. | 5919  |
| 23100 | =        | 6 25 0     |       |       | 2310 =  | 0 38 40    |       |       | 5658     | 5910    |       |
| 23200 | =        | 6 26 40    |       |       | 2320 =  | 0 38 40    |       |       | 5647     | 5911    |       |
| 23300 | =        | 6 28 20    |       |       | 2330 =  | 0 38 50    |       |       | 5656     | 5911    |       |
| 23400 | =        | 6 30 0     |       |       | 2340 =  | 0 39 0     |       |       | 5666     | 5911    |       |







| N.    | 0           | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     | P. P. |                                   |
|-------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------------------------|
| 2400  | 380 2112    | 2293  | 2474  | 2655  | 2836  | 3017  | 3198  | 3379  | 3560  | 3741  |       |                                   |
| 01    | 3922        | 4102  | 4283  | 4464  | 4645  | 4826  | 5007  | 5188  | 5368  | 5549  | 181   |                                   |
| 02    | 5730        | 5911  | 6092  | 6272  | 6453  | 6634  | 6815  | 6995  | 7176  | 7357  | 181   |                                   |
| 03    | 7538        | 7718  | 7899  | 8080  | 8261  | 8441  | 8622  | 8803  | 8983  | 9164  | 36.2  |                                   |
| 04    | 9345        | 9525  | 9706  | 9887  | 10067 | 10248 | 10428 | 10609 | 10790 | 10970 | 54.3  |                                   |
| 05    | 381 1111    | 1331  | 1512  | 1693  | 1873  | 2054  | 2234  | 2415  | 2595  | 2776  | 72.4  |                                   |
| 06    | 2956        | 3137  | 3317  | 3498  | 3678  | 3859  | 4039  | 4220  | 4400  | 4580  | 90.5  |                                   |
| 07    | 4761        | 4941  | 5122  | 5302  | 5483  | 5663  | 5843  | 6024  | 6204  | 6384  | 108.6 |                                   |
| 08    | 6565        | 6745  | 6926  | 7106  | 7286  | 7467  | 7647  | 7827  | 8007  | 8188  | 126.7 |                                   |
| 09    | 8368        | 8548  | 8729  | 8909  | 9089  | 9269  | 9450  | 9630  | 9810  | 9990  | 144.8 |                                   |
| 2410  | 382 0170    | 0351  | 0531  | 0711  | 0891  | 1071  | 1252  | 1432  | 1612  | 1792  | 162.9 |                                   |
| 11    | 1972        | 2152  | 2332  | 2512  | 2693  | 2873  | 3053  | 3233  | 3413  | 3593  | 180   |                                   |
| 12    | 3773        | 3953  | 4133  | 4313  | 4493  | 4673  | 4853  | 5033  | 5213  | 5393  | 18.0  |                                   |
| 13    | 5573        | 5753  | 5933  | 6113  | 6293  | 6473  | 6653  | 6833  | 7013  | 7193  | 36.0  |                                   |
| 14    | 7373        | 7553  | 7732  | 7912  | 8092  | 8272  | 8452  | 8632  | 8812  | 8992  | 54.0  |                                   |
| 15    | 9171        | 9351  | 9531  | 9711  | 9891  | 10070 | 10250 | 10430 | 10610 | 10790 | 72.0  |                                   |
| 16    | 383 0969    | 1149  | 1329  | 1509  | 1688  | 1868  | 2048  | 2227  | 2407  | 2587  | 90.0  |                                   |
| 17    | 2767        | 2946  | 3126  | 3306  | 3485  | 3665  | 3844  | 4024  | 4204  | 4383  | 108.0 |                                   |
| 18    | 4563        | 4743  | 4922  | 5102  | 5281  | 5461  | 5640  | 5820  | 6000  | 6179  | 126.0 |                                   |
| 19    | 6359        | 6538  | 6718  | 6897  | 7077  | 7256  | 7436  | 7615  | 7795  | 7974  | 144.0 |                                   |
| 2420  | 8154        | 8333  | 8513  | 8692  | 8871  | 9051  | 9230  | 9410  | 9589  | 9769  | 162.0 |                                   |
| 21    | 9948        | 10127 | 10307 | 10486 | 10665 | 10845 | 11024 | 11203 | 11383 | 11562 | 179   |                                   |
| 22    | 384 1741    | 1921  | 2100  | 2279  | 2459  | 2638  | 2817  | 2996  | 3176  | 3355  | 17.9  |                                   |
| 23    | 3534        | 3713  | 3893  | 4072  | 4251  | 4430  | 4609  | 4789  | 4968  | 5147  | 35.8  |                                   |
| 24    | 5326        | 5505  | 5684  | 5864  | 6043  | 6222  | 6401  | 6580  | 6759  | 6938  | 53.7  |                                   |
| 25    | 7117        | 7297  | 7476  | 7655  | 7834  | 8013  | 8192  | 8371  | 8550  | 8729  | 71.6  |                                   |
| 26    | 8908        | 9087  | 9266  | 9445  | 9624  | 9803  | 9982  | 10161 | 10340 | 10519 | 89.5  |                                   |
| 27    | 385 0698    | 0877  | 1056  | 1235  | 1413  | 1592  | 1771  | 1950  | 2129  | 2308  | 107.4 |                                   |
| 28    | 2487        | 2666  | 2845  | 3023  | 3202  | 3381  | 3560  | 3739  | 3918  | 4096  | 125.3 |                                   |
| 29    | 4275        | 4454  | 4633  | 4812  | 4990  | 5169  | 5348  | 5527  | 5705  | 5884  | 143.2 |                                   |
| 2430  | 6063        | 6241  | 6420  | 6599  | 6778  | 6956  | 7135  | 7314  | 7492  | 7671  | 161.1 |                                   |
| 31    | 7850        | 8028  | 8207  | 8386  | 8564  | 8743  | 8921  | 9100  | 9279  | 9457  | 178   |                                   |
| 32    | 9636        | 9814  | 9992  | 10171 | 10350 | 10528 | 10707 | 10886 | 11064 | 11243 | 17.8  |                                   |
| 33    | 386 1421    | 1600  | 1778  | 1957  | 2135  | 2314  | 2492  | 2670  | 2849  | 3027  | 35.6  |                                   |
| 34    | 3206        | 3384  | 3563  | 3741  | 3919  | 4098  | 4276  | 4455  | 4633  | 4811  | 53.4  |                                   |
| 35    | 4990        | 5168  | 5346  | 5525  | 5703  | 5881  | 6060  | 6238  | 6416  | 6595  | 71.2  |                                   |
| 36    | 6773        | 6951  | 7129  | 7308  | 7486  | 7664  | 7842  | 8021  | 8199  | 8377  | 89.0  |                                   |
| 37    | 8555        | 8733  | 8912  | 9090  | 9268  | 9446  | 9624  | 9803  | 9981  | 10159 | 106.8 |                                   |
| 38    | 387 0337    | 0515  | 0693  | 0871  | 1049  | 1228  | 1406  | 1584  | 1762  | 1940  | 124.6 |                                   |
| 39    | 2118        | 2296  | 2474  | 2652  | 2830  | 3008  | 3186  | 3364  | 3542  | 3720  | 142.4 |                                   |
| 2440  | 3898        | 4076  | 4254  | 4432  | 4610  | 4788  | 4966  | 5144  | 5322  | 5500  | 160.2 |                                   |
| 41    | 5678        | 5856  | 6034  | 6212  | 6389  | 6567  | 6745  | 6923  | 7101  | 7279  | 177   |                                   |
| 42    | 7457        | 7634  | 7812  | 7990  | 8168  | 8346  | 8524  | 8701  | 8879  | 9057  | 17.7  |                                   |
| 43    | 9235        | 9412  | 9590  | 9768  | 9946  | 10123 | 10301 | 10479 | 10657 | 10834 | 35.4  |                                   |
| 44    | 388 1012    | 1190  | 1367  | 1545  | 1723  | 1900  | 2078  | 2256  | 2433  | 2611  | 53.1  |                                   |
| 45    | 2789        | 2966  | 3144  | 3321  | 3499  | 3677  | 3854  | 4032  | 4209  | 4387  | 70.8  |                                   |
| 46    | 4565        | 4742  | 4920  | 5097  | 5275  | 5452  | 5630  | 5807  | 5985  | 6162  | 88.5  |                                   |
| 47    | 6340        | 6517  | 6695  | 6872  | 7050  | 7227  | 7404  | 7582  | 7759  | 7937  | 106.2 |                                   |
| 48    | 8114        | 8292  | 8469  | 8646  | 8824  | 9001  | 9178  | 9356  | 9533  | 9711  | 123.9 |                                   |
| 49    | 9888        | 10065 | 10243 | 10420 | 10597 | 10774 | 10952 | 11129 | 11306 | 11484 | 141.6 |                                   |
| 2450  | 389 1661    | 1838  | 2015  | 2193  | 2370  | 2547  | 2724  | 2902  | 3079  | 3256  | 159.3 |                                   |
| N.    | 0           | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     | P. P. |                                   |
| 2400  | = 6° 40' 0" |       |       |       |       |       |       |       |       |       | 2400  | = 0° 40' 0" S. 4.685 5651 T. 5945 |
| 24100 | = 6 41 40   |       |       |       |       |       |       |       |       |       | 2410  | = 0 40 10 5650                    |
| 24200 | = 6 43 20   |       |       |       |       |       |       |       |       |       | 2420  | = 0 40 20 5649                    |
| 24300 | = 6 45 0    |       |       |       |       |       |       |       |       |       | 2430  | = 0 40 30 5648                    |
| 24400 | = 6 46 40   |       |       |       |       |       |       |       |       |       | 2440  | = 0 40 40 5647                    |



| N.   | 0        | 1        | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     | P. P. |
|------|----------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 2450 | 189 1661 | 189 1661 | 201 5 | 210 1 | 217 0 | 224 7 | 232 1 | 239 2 | 247 9 | 256 6 |       |
| 51   | 1441     | 1460     | 1478  | 1496  | 1514  | 1531  | 1549  | 1567  | 1585  | 1603  | 177   |
| 52   | 1450     | 1468     | 1486  | 1504  | 1521  | 1539  | 1557  | 1574  | 1592  | 1610  | 177   |
| 53   | 1459     | 1477     | 1495  | 1513  | 1530  | 1548  | 1566  | 1583  | 1601  | 1619  | 177   |
| 54   | 1468     | 1486     | 1504  | 1521  | 1539  | 1557  | 1574  | 1592  | 1610  | 1628  | 177   |
| 55   | 1477     | 1495     | 1513  | 1530  | 1548  | 1566  | 1583  | 1601  | 1619  | 1637  | 177   |
| 56   | 1486     | 1504     | 1521  | 1539  | 1557  | 1574  | 1592  | 1610  | 1628  | 1646  | 177   |
| 57   | 1495     | 1513     | 1530  | 1548  | 1566  | 1583  | 1601  | 1619  | 1637  | 1655  | 177   |
| 58   | 1504     | 1521     | 1539  | 1557  | 1574  | 1592  | 1610  | 1628  | 1646  | 1664  | 177   |
| 59   | 1513     | 1530     | 1548  | 1566  | 1583  | 1601  | 1619  | 1637  | 1655  | 1673  | 177   |
| 2460 | 1521     | 1539     | 1557  | 1574  | 1592  | 1610  | 1628  | 1646  | 1664  | 1682  |       |
| 61   | 1530     | 1548     | 1566  | 1583  | 1601  | 1619  | 1637  | 1655  | 1673  | 1691  | 176   |
| 62   | 1539     | 1557     | 1574  | 1592  | 1610  | 1628  | 1646  | 1664  | 1682  | 1700  | 176   |
| 63   | 1548     | 1566     | 1583  | 1601  | 1619  | 1637  | 1655  | 1673  | 1691  | 1709  | 176   |
| 64   | 1557     | 1574     | 1592  | 1610  | 1628  | 1646  | 1664  | 1682  | 1700  | 1718  | 176   |
| 65   | 1566     | 1583     | 1601  | 1619  | 1637  | 1655  | 1673  | 1691  | 1709  | 1727  | 176   |
| 66   | 1574     | 1592     | 1610  | 1628  | 1646  | 1664  | 1682  | 1700  | 1718  | 1736  | 176   |
| 67   | 1583     | 1601     | 1619  | 1637  | 1655  | 1673  | 1691  | 1709  | 1727  | 1745  | 176   |
| 68   | 1592     | 1610     | 1628  | 1646  | 1664  | 1682  | 1700  | 1718  | 1736  | 1754  | 176   |
| 69   | 1601     | 1619     | 1637  | 1655  | 1673  | 1691  | 1709  | 1727  | 1745  | 1763  | 176   |
| 2470 | 1610     | 1628     | 1646  | 1664  | 1682  | 1700  | 1718  | 1736  | 1754  | 1772  |       |
| 71   | 1619     | 1637     | 1655  | 1673  | 1691  | 1709  | 1727  | 1745  | 1763  | 1781  | 175   |
| 72   | 1628     | 1646     | 1664  | 1682  | 1700  | 1718  | 1736  | 1754  | 1772  | 1790  | 175   |
| 73   | 1637     | 1655     | 1673  | 1691  | 1709  | 1727  | 1745  | 1763  | 1781  | 1799  | 175   |
| 74   | 1646     | 1664     | 1682  | 1700  | 1718  | 1736  | 1754  | 1772  | 1790  | 1808  | 175   |
| 75   | 1655     | 1673     | 1691  | 1709  | 1727  | 1745  | 1763  | 1781  | 1799  | 1817  | 175   |
| 76   | 1664     | 1682     | 1700  | 1718  | 1736  | 1754  | 1772  | 1790  | 1808  | 1826  | 175   |
| 77   | 1673     | 1691     | 1709  | 1727  | 1745  | 1763  | 1781  | 1799  | 1817  | 1835  | 175   |
| 78   | 1682     | 1700     | 1718  | 1736  | 1754  | 1772  | 1790  | 1808  | 1826  | 1844  | 175   |
| 79   | 1691     | 1709     | 1727  | 1745  | 1763  | 1781  | 1799  | 1817  | 1835  | 1853  | 175   |
| 2480 | 1700     | 1718     | 1736  | 1754  | 1772  | 1790  | 1808  | 1826  | 1844  | 1862  |       |
| 81   | 1709     | 1727     | 1745  | 1763  | 1781  | 1799  | 1817  | 1835  | 1853  | 1871  | 174   |
| 82   | 1718     | 1736     | 1754  | 1772  | 1790  | 1808  | 1826  | 1844  | 1862  | 1880  | 174   |
| 83   | 1727     | 1745     | 1763  | 1781  | 1799  | 1817  | 1835  | 1853  | 1871  | 1889  | 174   |
| 84   | 1736     | 1754     | 1772  | 1790  | 1808  | 1826  | 1844  | 1862  | 1880  | 1898  | 174   |
| 85   | 1745     | 1763     | 1781  | 1799  | 1817  | 1835  | 1853  | 1871  | 1889  | 1907  | 174   |
| 86   | 1754     | 1772     | 1790  | 1808  | 1826  | 1844  | 1862  | 1880  | 1898  | 1916  | 174   |
| 87   | 1763     | 1781     | 1799  | 1817  | 1835  | 1853  | 1871  | 1889  | 1907  | 1925  | 174   |
| 88   | 1772     | 1790     | 1808  | 1826  | 1844  | 1862  | 1880  | 1898  | 1916  | 1934  | 174   |
| 89   | 1781     | 1799     | 1817  | 1835  | 1853  | 1871  | 1889  | 1907  | 1925  | 1943  | 174   |
| 2490 | 1790     | 1808     | 1826  | 1844  | 1862  | 1880  | 1898  | 1916  | 1934  | 1952  |       |
| 91   | 1799     | 1817     | 1835  | 1853  | 1871  | 1889  | 1907  | 1925  | 1943  | 1961  | 173   |
| 92   | 1808     | 1826     | 1844  | 1862  | 1880  | 1898  | 1916  | 1934  | 1952  | 1970  | 173   |
| 93   | 1817     | 1835     | 1853  | 1871  | 1889  | 1907  | 1925  | 1943  | 1961  | 1979  | 173   |
| 94   | 1826     | 1844     | 1862  | 1880  | 1898  | 1916  | 1934  | 1952  | 1970  | 1988  | 173   |
| 95   | 1835     | 1853     | 1871  | 1889  | 1907  | 1925  | 1943  | 1961  | 1979  | 1997  | 173   |
| 96   | 1844     | 1862     | 1880  | 1898  | 1916  | 1934  | 1952  | 1970  | 1988  | 2006  | 173   |
| 97   | 1853     | 1871     | 1889  | 1907  | 1925  | 1943  | 1961  | 1979  | 1997  | 2015  | 173   |
| 98   | 1862     | 1880     | 1898  | 1916  | 1934  | 1952  | 1970  | 1988  | 2006  | 2024  | 173   |
| 99   | 1871     | 1889     | 1907  | 1925  | 1943  | 1961  | 1979  | 1997  | 2015  | 2033  | 173   |
| 2500 | 1880     | 1898     | 1916  | 1934  | 1952  | 1970  | 1988  | 2006  | 2024  | 2042  |       |

| N.   | 0    | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | P. P. |
|------|------|------|------|------|------|------|------|------|------|------|-------|
| 2500 | 1880 | 1898 | 1916 | 1934 | 1952 | 1970 | 1988 | 2006 | 2024 | 2042 |       |
| 2510 | 1889 | 1907 | 1925 | 1943 | 1961 | 1979 | 1997 | 2015 | 2033 | 2051 | 173   |
| 2520 | 1898 | 1916 | 1934 | 1952 | 1970 | 1988 | 2006 | 2024 | 2042 | 2060 | 173   |
| 2530 | 1907 | 1925 | 1943 | 1961 | 1979 | 1997 | 2015 | 2033 | 2051 | 2069 | 173   |
| 2540 | 1916 | 1934 | 1952 | 1970 | 1988 | 2006 | 2024 | 2042 | 2060 | 2078 | 173   |
| 2550 | 1925 | 1943 | 1961 | 1979 | 1997 | 2015 | 2033 | 2051 | 2069 | 2087 | 173   |
| 2560 | 1934 | 1952 | 1970 | 1988 | 2006 | 2024 | 2042 | 2060 | 2078 | 2096 | 173   |
| 2570 | 1943 | 1961 | 1979 | 1997 | 2015 | 2033 | 2051 | 2069 | 2087 | 2105 | 173   |
| 2580 | 1952 | 1970 | 1988 | 2006 | 2024 | 2042 | 2060 | 2078 | 2096 | 2114 | 173   |
| 2590 | 1961 | 1979 | 1997 | 2015 | 2033 | 2051 | 2069 | 2087 | 2105 | 2123 | 173   |



| N.   | 0        | 1    | 2    | 3     | 4     | 5     | 6     | 7     | 8     | 9     |
|------|----------|------|------|-------|-------|-------|-------|-------|-------|-------|
| 2500 | 397 9400 | 9574 | 9748 | 9921  | 0105  | 0278  | 0451  | 0624  | 0797  | 0970  |
| 01   | 398 1137 | 1311 | 1484 | 1658  | 1831  | 1994  | 2167  | 2340  | 2513  | 2686  |
| 02   | 2873     | 3047 | 3220 | 3393  | 3566  | 3739  | 3912  | 4085  | 4258  | 4431  |
| 03   | 4608     | 4782 | 4956 | 5129  | 5302  | 5475  | 5648  | 5821  | 5994  | 6167  |
| 04   | 6343     | 6517 | 6690 | 6863  | 7036  | 7209  | 7382  | 7555  | 7728  | 7901  |
| 05   | 8077     | 8251 | 8424 | 8597  | 8770  | 8943  | 9116  | 9289  | 9462  | 9635  |
| 06   | 9811     | 9984 | 0157 | 0330  | 0503  | 0676  | 0849  | 1022  | 1195  | 1368  |
| 07   | 399 1543 | 1717 | 1890 | 2063  | 2236  | 2409  | 2582  | 2755  | 2928  | 3101  |
| 08   | 3275     | 3448 | 3622 | 3795  | 3968  | 4141  | 4314  | 4487  | 4660  | 4833  |
| 09   | 5007     | 5180 | 5354 | 5526  | 5700  | 5873  | 6046  | 6219  | 6392  | 6565  |
| 2510 | 6737     | 6910 | 7083 | 7256  | 7429  | 7602  | 7775  | 7948  | 8121  | 8294  |
| 11   | 8467     | 8640 | 8813 | 8986  | 9159  | 9332  | 9505  | 9678  | 9851  | 10024 |
| 12   | 400 0196 | 0369 | 0542 | 0715  | 0888  | 1061  | 1234  | 1407  | 1580  | 1753  |
| 13   | 1925     | 2098 | 2271 | 2444  | 2617  | 2790  | 2963  | 3136  | 3309  | 3482  |
| 14   | 3653     | 3826 | 3999 | 4172  | 4345  | 4518  | 4691  | 4864  | 5037  | 5210  |
| 15   | 5380     | 5553 | 5726 | 5899  | 6072  | 6245  | 6418  | 6591  | 6764  | 6937  |
| 16   | 7106     | 7279 | 7452 | 7625  | 7798  | 7971  | 8144  | 8317  | 8490  | 8663  |
| 17   | 8836     | 9009 | 9182 | 9355  | 9528  | 9701  | 9874  | 10047 | 10220 | 10393 |
| 18   | 401 0357 | 0530 | 0703 | 0876  | 1049  | 1222  | 1395  | 1568  | 1741  | 1914  |
| 19   | 2282     | 2455 | 2628 | 2801  | 2974  | 3147  | 3320  | 3493  | 3666  | 3839  |
| 2520 | 405 4178 | 4351 | 4524 | 4697  | 4870  | 5043  | 5216  | 5389  | 5562  | 5735  |
| 21   | 5728     | 5901 | 6074 | 6247  | 6420  | 6593  | 6766  | 6939  | 7112  | 7285  |
| 22   | 7458     | 7631 | 7804 | 7977  | 8150  | 8323  | 8496  | 8669  | 8842  | 9015  |
| 23   | 9173     | 9346 | 9519 | 9692  | 9865  | 10038 | 10211 | 10384 | 10557 | 10730 |
| 24   | 402 0894 | 1066 | 1239 | 1412  | 1585  | 1758  | 1931  | 2104  | 2277  | 2450  |
| 25   | 2614     | 2787 | 2960 | 3133  | 3306  | 3479  | 3652  | 3825  | 3998  | 4171  |
| 26   | 4333     | 4506 | 4679 | 4852  | 5025  | 5198  | 5371  | 5544  | 5717  | 5890  |
| 27   | 6032     | 6205 | 6378 | 6551  | 6724  | 6897  | 7070  | 7243  | 7416  | 7589  |
| 28   | 7771     | 7944 | 8117 | 8290  | 8463  | 8636  | 8809  | 8982  | 9155  | 9328  |
| 29   | 9488     | 9661 | 9834 | 10007 | 10180 | 10353 | 10526 | 10699 | 10872 | 11045 |
| 2530 | 403 1205 | 1378 | 1551 | 1724  | 1897  | 2070  | 2243  | 2416  | 2589  | 2762  |
| 31   | 2921     | 3094 | 3267 | 3440  | 3613  | 3786  | 3959  | 4132  | 4305  | 4478  |
| 32   | 4637     | 4810 | 4983 | 5156  | 5329  | 5502  | 5675  | 5848  | 6021  | 6194  |
| 33   | 6354     | 6527 | 6700 | 6873  | 7046  | 7219  | 7392  | 7565  | 7738  | 7911  |
| 34   | 8066     | 8239 | 8412 | 8585  | 8758  | 8931  | 9104  | 9277  | 9450  | 9623  |
| 35   | 9780     | 9953 | 0126 | 0299  | 0472  | 0645  | 0818  | 0991  | 1164  | 1337  |
| 36   | 404 1492 | 1665 | 1838 | 2011  | 2184  | 2357  | 2530  | 2703  | 2876  | 3049  |
| 37   | 3205     | 3378 | 3551 | 3724  | 3897  | 4070  | 4243  | 4416  | 4589  | 4762  |
| 38   | 4916     | 5089 | 5262 | 5435  | 5608  | 5781  | 5954  | 6127  | 6300  | 6473  |
| 39   | 6627     | 6800 | 6973 | 7146  | 7319  | 7492  | 7665  | 7838  | 8011  | 8184  |
| 2540 | 8337     | 8510 | 8683 | 8856  | 9029  | 9202  | 9375  | 9548  | 9721  | 9894  |
| 41   | 405 0017 | 0190 | 0363 | 0536  | 0709  | 0882  | 1055  | 1228  | 1401  | 1574  |
| 42   | 1755     | 1928 | 2101 | 2274  | 2447  | 2620  | 2793  | 2966  | 3139  | 3312  |
| 43   | 3464     | 3637 | 3810 | 3983  | 4156  | 4329  | 4502  | 4675  | 4848  | 5021  |
| 44   | 5171     | 5344 | 5517 | 5690  | 5863  | 6036  | 6209  | 6382  | 6555  | 6728  |
| 45   | 6878     | 7051 | 7224 | 7397  | 7570  | 7743  | 7916  | 8089  | 8262  | 8435  |
| 46   | 8584     | 8757 | 8930 | 9103  | 9276  | 9449  | 9622  | 9795  | 9968  | 10141 |
| 47   | 406 0280 | 0453 | 0626 | 0799  | 0972  | 1145  | 1318  | 1491  | 1664  | 1837  |
| 48   | 1994     | 2167 | 2340 | 2513  | 2686  | 2859  | 3032  | 3205  | 3378  | 3551  |
| 49   | 3668     | 3841 | 4014 | 4187  | 4360  | 4533  | 4706  | 4879  | 5052  | 5225  |
| 2550 | 5402     | 5575 | 5748 | 5921  | 6094  | 6267  | 6440  | 6613  | 6786  | 6959  |

| N. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|----|---|---|---|---|---|---|---|---|---|---|
|----|---|---|---|---|---|---|---|---|---|---|

25000 = 6 6 6 40

25100 = 6 6 6 40

25200 = 7 0 0

25300 = 7 0 0

25400 = 7 0 0

25500 = 7 0 0











| N.   | 0        | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     | P. P.   |
|------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------|
| 2650 | 444 449  | 4644  | 4786  | 4950  | 5144  | 5375  | 5642  | 5966  | 6344  | 6733  |         |
| 51   | 48 07    | 4904  | 4944  | 4986  | 5030  | 5076  | 5124  | 5172  | 5220  | 5268  | 161     |
| 52   | 47 13    | 5009  | 5064  | 5126  | 5190  | 5256  | 5324  | 5392  | 5460  | 5528  | 1 16.4  |
| 53   | 46 17    | 5116  | 5184  | 5256  | 5330  | 5406  | 5484  | 5562  | 5640  | 5718  | 2 32.8  |
| 54   | 45 19    | 5224  | 5296  | 5372  | 5450  | 5528  | 5606  | 5684  | 5762  | 5840  | 3 49.2  |
| 55   | 44 19    | 5332  | 5408  | 5488  | 5568  | 5648  | 5728  | 5808  | 5888  | 5968  | 4 65.6  |
| 56   | 43 18    | 5440  | 5520  | 5600  | 5680  | 5760  | 5840  | 5920  | 6000  | 6080  | 5 82.0  |
| 57   | 42 16    | 5548  | 5632  | 5716  | 5800  | 5884  | 5968  | 6052  | 6136  | 6220  | 6 98.4  |
| 58   | 41 13    | 5656  | 5744  | 5832  | 5920  | 6008  | 6096  | 6184  | 6272  | 6360  | 7 114.8 |
| 59   | 40 10    | 5764  | 5856  | 5948  | 6040  | 6132  | 6224  | 6316  | 6408  | 6500  | 8 131.2 |
| 2660 | 5866     | 5960  | 6054  | 6148  | 6242  | 6336  | 6430  | 6524  | 6618  | 6712  | 9 147.6 |
| 60   | 43 5 149 | 6064  | 6152  | 6240  | 6328  | 6416  | 6504  | 6592  | 6680  | 6768  | 1 163   |
| 61   | 42 04    | 6172  | 6264  | 6356  | 6448  | 6540  | 6632  | 6724  | 6816  | 6908  | 2 16.4  |
| 62   | 41 02    | 6280  | 6376  | 6472  | 6568  | 6664  | 6760  | 6856  | 6952  | 7048  | 3 32.6  |
| 63   | 40 00    | 6388  | 6488  | 6588  | 6688  | 6788  | 6888  | 6988  | 7088  | 7188  | 4 48.8  |
| 64   | 39 58    | 6496  | 6596  | 6696  | 6796  | 6896  | 6996  | 7096  | 7196  | 7296  | 5 65.0  |
| 65   | 38 56    | 6604  | 6704  | 6804  | 6904  | 7004  | 7104  | 7204  | 7304  | 7404  | 6 81.2  |
| 66   | 37 54    | 6712  | 6812  | 6912  | 7012  | 7112  | 7212  | 7312  | 7412  | 7512  | 7 97.4  |
| 67   | 36 52    | 6820  | 6920  | 7020  | 7120  | 7220  | 7320  | 7420  | 7520  | 7620  | 8 113.6 |
| 68   | 35 50    | 6928  | 7028  | 7128  | 7228  | 7328  | 7428  | 7528  | 7628  | 7728  | 9 130.0 |
| 69   | 34 48    | 7036  | 7136  | 7236  | 7336  | 7436  | 7536  | 7636  | 7736  | 7836  | 149.2   |
| 2670 | 7144     | 7248  | 7352  | 7456  | 7560  | 7664  | 7768  | 7872  | 7976  | 8080  |         |
| 70   | 33 46    | 7256  | 7356  | 7456  | 7556  | 7656  | 7756  | 7856  | 7956  | 8056  | 1 163   |
| 71   | 32 44    | 7364  | 7464  | 7564  | 7664  | 7764  | 7864  | 7964  | 8064  | 8164  | 2 16.4  |
| 72   | 31 42    | 7472  | 7572  | 7672  | 7772  | 7872  | 7972  | 8072  | 8172  | 8272  | 3 32.6  |
| 73   | 30 40    | 7580  | 7680  | 7780  | 7880  | 7980  | 8080  | 8180  | 8280  | 8380  | 4 48.8  |
| 74   | 29 38    | 7688  | 7788  | 7888  | 7988  | 8088  | 8188  | 8288  | 8388  | 8488  | 5 65.0  |
| 75   | 28 36    | 7796  | 7896  | 7996  | 8096  | 8196  | 8296  | 8396  | 8496  | 8596  | 6 81.2  |
| 76   | 27 34    | 7904  | 8004  | 8104  | 8204  | 8304  | 8404  | 8504  | 8604  | 8704  | 7 97.4  |
| 77   | 26 32    | 8012  | 8112  | 8212  | 8312  | 8412  | 8512  | 8612  | 8712  | 8812  | 8 113.6 |
| 78   | 25 30    | 8120  | 8220  | 8320  | 8420  | 8520  | 8620  | 8720  | 8820  | 8920  | 9 130.0 |
| 79   | 24 28    | 8228  | 8328  | 8428  | 8528  | 8628  | 8728  | 8828  | 8928  | 9028  | 145.8   |
| 2680 | 8336     | 8440  | 8544  | 8648  | 8752  | 8856  | 8960  | 9064  | 9168  | 9272  |         |
| 80   | 23 26    | 8448  | 8548  | 8648  | 8748  | 8848  | 8948  | 9048  | 9148  | 9248  | 1 163   |
| 81   | 22 24    | 8556  | 8656  | 8756  | 8856  | 8956  | 9056  | 9156  | 9256  | 9356  | 2 16.4  |
| 82   | 21 22    | 8664  | 8764  | 8864  | 8964  | 9064  | 9164  | 9264  | 9364  | 9464  | 3 32.6  |
| 83   | 20 20    | 8772  | 8872  | 8972  | 9072  | 9172  | 9272  | 9372  | 9472  | 9572  | 4 48.8  |
| 84   | 19 18    | 8880  | 8980  | 9080  | 9180  | 9280  | 9380  | 9480  | 9580  | 9680  | 5 65.0  |
| 85   | 18 16    | 8988  | 9088  | 9188  | 9288  | 9388  | 9488  | 9588  | 9688  | 9788  | 6 81.2  |
| 86   | 17 14    | 9096  | 9196  | 9296  | 9396  | 9496  | 9596  | 9696  | 9796  | 9896  | 7 97.4  |
| 87   | 16 12    | 9204  | 9304  | 9404  | 9504  | 9604  | 9704  | 9804  | 9904  | 10004 | 8 113.6 |
| 88   | 15 10    | 9312  | 9412  | 9512  | 9612  | 9712  | 9812  | 9912  | 10012 | 10112 | 9 130.0 |
| 89   | 14 08    | 9420  | 9520  | 9620  | 9720  | 9820  | 9920  | 10020 | 10120 | 10220 | 144.2   |
| 2690 | 9528     | 9632  | 9736  | 9840  | 9944  | 10048 | 10152 | 10256 | 10360 | 10464 |         |
| 90   | 13 06    | 9640  | 9740  | 9840  | 9940  | 10040 | 10140 | 10240 | 10340 | 10440 | 1 163   |
| 91   | 12 04    | 9748  | 9848  | 9948  | 10048 | 10148 | 10248 | 10348 | 10448 | 10548 | 2 16.4  |
| 92   | 11 02    | 9856  | 9956  | 10056 | 10156 | 10256 | 10356 | 10456 | 10556 | 10656 | 3 32.6  |
| 93   | 10 00    | 9964  | 10064 | 10164 | 10264 | 10364 | 10464 | 10564 | 10664 | 10764 | 4 48.8  |
| 94   | 9 58     | 10072 | 10172 | 10272 | 10372 | 10472 | 10572 | 10672 | 10772 | 10872 | 5 65.0  |
| 95   | 8 56     | 10180 | 10280 | 10380 | 10480 | 10580 | 10680 | 10780 | 10880 | 10980 | 6 81.2  |
| 96   | 7 54     | 10288 | 10388 | 10488 | 10588 | 10688 | 10788 | 10888 | 10988 | 11088 | 7 97.4  |
| 97   | 6 52     | 10396 | 10496 | 10596 | 10696 | 10796 | 10896 | 10996 | 11096 | 11196 | 8 113.6 |
| 98   | 5 50     | 10504 | 10604 | 10704 | 10804 | 10904 | 11004 | 11104 | 11204 | 11304 | 9 130.0 |
| 99   | 4 48     | 10612 | 10712 | 10812 | 10912 | 11012 | 11112 | 11212 | 11312 | 11412 | 144.2   |
| 2700 | 10720    | 10824 | 10928 | 11032 | 11136 | 11240 | 11344 | 11448 | 11552 | 11656 |         |

| N.   | 0       | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     | P. P. |
|------|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 2650 | 444 449 | 4644  | 4786  | 4950  | 5144  | 5375  | 5642  | 5966  | 6344  | 6733  |       |
| 2660 | 5866    | 5960  | 6054  | 6148  | 6242  | 6336  | 6430  | 6524  | 6618  | 6712  |       |
| 2670 | 7144    | 7248  | 7352  | 7456  | 7560  | 7664  | 7768  | 7872  | 7976  | 8080  |       |
| 2680 | 8336    | 8440  | 8544  | 8648  | 8752  | 8856  | 8960  | 9064  | 9168  | 9272  |       |
| 2690 | 9528    | 9632  | 9736  | 9840  | 9944  | 10048 | 10152 | 10256 | 10360 | 10464 |       |
| 2700 | 10720   | 10824 | 10928 | 11032 | 11136 | 11240 | 11344 | 11448 | 11552 | 11656 |       |

S. 4.483 5029 T. 5988

5028 5989

5027 5991

5026 5993



| N.    | 0          | 1    | 2     | 3     | 4     | 5          | 6        | 7     | 8     | 9     | P. P. |
|-------|------------|------|-------|-------|-------|------------|----------|-------|-------|-------|-------|
| 2700  | 431 3638   | 3798 | 3959  | 4120  | 4281  | 4442       | 4603     | 4764  | 4925  | 5086  |       |
| 01    | 5246       | 5407 | 5567  | 5728  | 5889  | 6050       | 6211     | 6372  | 6533  | 6694  |       |
| 02    | 6853       | 7014 | 7175  | 7336  | 7497  | 7658       | 7819     | 7980  | 8141  | 8302  |       |
| 03    | 8460       | 8621 | 8782  | 8942  | 9103  | 9264       | 9425     | 9586  | 9747  | 9908  | 111   |
| 04    | 432 0067   | 0227 | 0388  | 0549  | 0709  | 0870       | 1031     | 1192  | 1353  | 1514  | 1     |
| 05    | 1673       | 1833 | 1994  | 2154  | 2315  | 2476       | 2637     | 2798  | 2959  | 3120  | 2     |
| 06    | 3278       | 3438 | 3599  | 3759  | 3920  | 4081       | 4242     | 4403  | 4564  | 4725  | 3     |
| 07    | 4883       | 5043 | 5203  | 5364  | 5524  | 5685       | 5846     | 6007  | 6168  | 6329  | 4     |
| 08    | 6487       | 6647 | 6807  | 6968  | 7128  | 7289       | 7450     | 7611  | 7772  | 7933  | 5     |
| 09    | 8090       | 8250 | 8411  | 8571  | 8732  | 8893       | 9054     | 9215  | 9376  | 9537  | 6     |
| 2710  | 9693       | 9853 | 10013 | 10174 | 10334 | 10495      | 10656    | 10817 | 10978 | 11139 | 7     |
| 11    | 433 1295   | 1455 | 1616  | 1776  | 1936  | 2097       | 2258     | 2419  | 2580  | 2741  | 8     |
| 12    | 2897       | 3057 | 3217  | 3377  | 3538  | 3699       | 3859     | 4020  | 4181  | 4342  | 9     |
| 13    | 4498       | 4658 | 4818  | 4978  | 5139  | 5299       | 5460     | 5621  | 5782  | 5943  | 10    |
| 14    | 6098       | 6258 | 6418  | 6578  | 6739  | 6899       | 7060     | 7221  | 7382  | 7543  | 11    |
| 15    | 7698       | 7858 | 8018  | 8178  | 8339  | 8499       | 8660     | 8821  | 8982  | 9143  | 12    |
| 16    | 9298       | 9458 | 9617  | 9777  | 9938  | 10099      | 10260    | 10421 | 10582 | 10743 | 13    |
| 17    | 434 0896   | 1056 | 1216  | 1376  | 1536  | 1697       | 1858     | 2019  | 2180  | 2341  | 14    |
| 18    | 2495       | 2654 | 2814  | 2974  | 3135  | 3296       | 3457     | 3618  | 3779  | 3940  | 15    |
| 19    | 4093       | 4253 | 4413  | 4574  | 4734  | 4895       | 5056     | 5217  | 5378  | 5539  | 16    |
| 2720  | 5689       | 5849 | 6008  | 6168  | 6328  | 6489       | 6649     | 6810  | 6971  | 7132  | 17    |
| 21    | 7285       | 7445 | 7605  | 7765  | 7926  | 8086       | 8247     | 8408  | 8569  | 8729  | 18    |
| 22    | 8881       | 9041 | 9200  | 9361  | 9521  | 9682       | 9843     | 10004 | 10165 | 10326 | 19    |
| 23    | 435 0476   | 0636 | 0795  | 0955  | 1115  | 1276       | 1437     | 1598  | 1759  | 1920  | 20    |
| 24    | 2071       | 2230 | 2390  | 2550  | 2711  | 2872       | 3033     | 3194  | 3355  | 3516  | 21    |
| 25    | 3665       | 3824 | 3984  | 4144  | 4305  | 4466       | 4627     | 4788  | 4949  | 5110  | 22    |
| 26    | 5259       | 5418 | 5577  | 5738  | 5899  | 6060       | 6221     | 6382  | 6543  | 6704  | 23    |
| 27    | 6851       | 7011 | 7170  | 7330  | 7491  | 7652       | 7813     | 7974  | 8135  | 8296  | 24    |
| 28    | 8444       | 8603 | 8763  | 8924  | 9085  | 9246       | 9407     | 9568  | 9729  | 9890  | 25    |
| 29    | 436 0035   | 0194 | 0354  | 0514  | 0675  | 0836       | 0997     | 1158  | 1319  | 1480  | 26    |
| 2780  | 1626       | 1786 | 1945  | 2105  | 2266  | 2427       | 2588     | 2749  | 2910  | 3071  | 27    |
| 31    | 3217       | 3376 | 3535  | 3695  | 3856  | 4017       | 4178     | 4339  | 4500  | 4661  | 28    |
| 32    | 4807       | 4966 | 5125  | 5286  | 5447  | 5608       | 5769     | 5930  | 6091  | 6252  | 29    |
| 33    | 6396       | 6555 | 6714  | 6875  | 7036  | 7197       | 7358     | 7519  | 7680  | 7841  | 30    |
| 34    | 7985       | 8144 | 8303  | 8463  | 8624  | 8785       | 8946     | 9107  | 9268  | 9429  | 31    |
| 35    | 9573       | 9732 | 9891  | 10050 | 10211 | 10372      | 10533    | 10694 | 10855 | 11016 | 32    |
| 36    | 437 1161   | 1320 | 1478  | 1637  | 1798  | 1959       | 2120     | 2281  | 2442  | 2603  | 33    |
| 37    | 2748       | 2907 | 3065  | 3224  | 3385  | 3546       | 3707     | 3868  | 4029  | 4190  | 34    |
| 38    | 4334       | 4493 | 4652  | 4813  | 4974  | 5135       | 5296     | 5457  | 5618  | 5779  | 35    |
| 39    | 5920       | 6079 | 6237  | 6398  | 6559  | 6720       | 6881     | 7042  | 7203  | 7364  | 36    |
| 2740  | 7506       | 7664 | 7823  | 7981  | 8140  | 8299       | 8459     | 8619  | 8779  | 8939  | 37    |
| 41    | 9090       | 9249 | 9407  | 9566  | 9726  | 9886       | 10047    | 10208 | 10369 | 10530 | 38    |
| 42    | 438 0675   | 0833 | 0991  | 1150  | 1309  | 1468       | 1628     | 1789  | 1950  | 2111  | 39    |
| 43    | 2258       | 2416 | 2575  | 2733  | 2891  | 3050       | 3211     | 3372  | 3533  | 3694  | 40    |
| 44    | 3841       | 3999 | 4158  | 4316  | 4474  | 4633       | 4794     | 4955  | 5116  | 5277  | 41    |
| 45    | 5423       | 5582 | 5740  | 5899  | 6058  | 6217       | 6378     | 6539  | 6699  | 6860  | 42    |
| 46    | 7005       | 7163 | 7322  | 7480  | 7638  | 7797       | 7958     | 8119  | 8280  | 8441  | 43    |
| 47    | 8587       | 8745 | 8903  | 9061  | 9219  | 9378       | 9539     | 9699  | 9860  | 10021 | 44    |
| 48    | 439 0167   | 0325 | 0483  | 0641  | 0799  | 0957       | 1116     | 1277  | 1438  | 1599  | 45    |
| 49    | 1747       | 1905 | 2063  | 2221  | 2379  | 2538       | 2699     | 2860  | 3021  | 3182  | 46    |
| 2750  | 3327       | 3485 | 3643  | 3801  | 3959  | 4116       | 4274     | 4433  | 4594  | 4755  | 47    |
| N.    | 0          | 1    | 2     | 3     | 4     | 5          | 6        | 7     | 8     | 9     | P. P. |
| 27000 | == 7 30 0  |      |       |       | 27000 | == 0 45 0  | H. 4.635 | 1613  | T     | 1797  |       |
| 27100 | == 7 31 40 |      |       |       | 27100 | == 0 45 10 |          | 1614  |       | 1797  |       |
| 27200 | == 7 33 20 |      |       |       | 27200 | == 0 45 20 |          | 1615  |       | 1797  |       |
| 27300 | == 7 35 0  |      |       |       | 27300 | == 0 45 30 |          | 1616  |       | 1797  |       |
| 27400 | == 7 36 40 |      |       |       | 27400 | == 0 45 40 |          | 1617  |       | 1797  |       |



| N.   | 0        | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     | P. P. |
|------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 2750 | 430 3447 | 4485  | 4644  | 4801  | 4959  | 5116  | 5274  | 5432  | 5590  | 5748  |       |
| 51   | 5906     | 6064  | 6222  | 6379  | 6537  | 6695  | 6853  | 6911  | 6169  | 6426  | 158   |
| 52   | 6484     | 6642  | 6800  | 6958  | 7115  | 7273  | 7431  | 7589  | 7747  | 7905  | 159   |
| 53   | 8063     | 8220  | 8378  | 8535  | 8693  | 8851  | 9009  | 9166  | 9324  | 9482  | 160   |
| 54   | 9649     | 9797  | 9955  | 0112  | 0270  | 0428  | 0586  | 0744  | 0901  | 1059  | 161   |
| 55   | 1116     | 1274  | 1431  | 1589  | 1747  | 1905  | 2063  | 2221  | 2379  | 2536  | 162   |
| 56   | 2794     | 2950  | 3107  | 3265  | 3423  | 3580  | 3738  | 3896  | 4054  | 4210  | 163   |
| 57   | 4368     | 4525  | 4683  | 4840  | 4998  | 5155  | 5313  | 5470  | 5628  | 5785  | 164   |
| 58   | 5941     | 6100  | 6258  | 6415  | 6573  | 6730  | 6888  | 7046  | 7204  | 7361  | 165   |
| 59   | 7517     | 7674  | 7832  | 7989  | 8147  | 8304  | 8462  | 8619  | 8777  | 8934  | 166   |
| 2760 | 9104     | 9261  | 9419  | 9576  | 9734  | 9891  | 0049  | 0206  | 0364  | 0521  | 167   |
| 61   | 11004    | 11161 | 11319 | 11476 | 11634 | 11791 | 11949 | 12106 | 12264 | 12421 | 168   |
| 62   | 12587    | 12744 | 12902 | 13059 | 13217 | 13374 | 13532 | 13689 | 13847 | 14004 | 169   |
| 63   | 14589    | 14746 | 14904 | 15061 | 15219 | 15376 | 15534 | 15691 | 15849 | 16006 | 170   |
| 64   | 16591    | 16748 | 16906 | 17063 | 17221 | 17378 | 17536 | 17693 | 17851 | 18008 | 171   |
| 65   | 18594    | 18751 | 18909 | 19066 | 19224 | 19381 | 19539 | 19696 | 19854 | 20011 | 172   |
| 66   | 20517    | 20674 | 20832 | 20989 | 21147 | 21304 | 21462 | 21619 | 21777 | 21934 | 173   |
| 67   | 21957    | 22114 | 22272 | 22429 | 22587 | 22744 | 22902 | 23059 | 23217 | 23374 | 174   |
| 68   | 23511    | 23669 | 23826 | 23984 | 24141 | 24299 | 24456 | 24614 | 24771 | 24929 | 175   |
| 69   | 25089    | 25246 | 25404 | 25561 | 25719 | 25876 | 26034 | 26191 | 26349 | 26506 | 176   |
| 2770 | 26704    | 26861 | 27019 | 27176 | 27334 | 27491 | 27649 | 27806 | 27964 | 28121 | 177   |
| 71   | 28379    | 28536 | 28694 | 28851 | 29009 | 29166 | 29324 | 29481 | 29639 | 29796 | 178   |
| 72   | 29954    | 30111 | 30269 | 30426 | 30584 | 30741 | 30899 | 31056 | 31214 | 31371 | 179   |
| 73   | 31529    | 31686 | 31844 | 32001 | 32159 | 32316 | 32474 | 32631 | 32789 | 32946 | 180   |
| 74   | 33104    | 33261 | 33419 | 33576 | 33734 | 33891 | 34049 | 34206 | 34364 | 34521 | 181   |
| 75   | 34679    | 34836 | 34994 | 35151 | 35309 | 35466 | 35624 | 35781 | 35939 | 36096 | 182   |
| 76   | 36254    | 36411 | 36569 | 36726 | 36884 | 37041 | 37199 | 37356 | 37514 | 37671 | 183   |
| 77   | 37829    | 37986 | 38144 | 38301 | 38459 | 38616 | 38774 | 38931 | 39089 | 39246 | 184   |
| 78   | 39404    | 39561 | 39719 | 39876 | 40034 | 40191 | 40349 | 40506 | 40664 | 40821 | 185   |
| 79   | 40979    | 41136 | 41294 | 41451 | 41609 | 41766 | 41924 | 42081 | 42239 | 42396 | 186   |
| 2780 | 42554    | 42711 | 42869 | 43026 | 43184 | 43341 | 43499 | 43656 | 43814 | 43971 | 187   |
| 81   | 44129    | 44286 | 44444 | 44601 | 44759 | 44916 | 45074 | 45231 | 45389 | 45546 | 188   |
| 82   | 45711    | 45869 | 46026 | 46184 | 46341 | 46499 | 46656 | 46814 | 46971 | 47129 | 189   |
| 83   | 47294    | 47451 | 47609 | 47766 | 47924 | 48081 | 48239 | 48396 | 48554 | 48711 | 190   |
| 84   | 48869    | 49026 | 49184 | 49341 | 49499 | 49656 | 49814 | 49971 | 50129 | 50286 | 191   |
| 85   | 50444    | 50601 | 50759 | 50916 | 51074 | 51231 | 51389 | 51546 | 51704 | 51861 | 192   |
| 86   | 52029    | 52186 | 52344 | 52501 | 52659 | 52816 | 52974 | 53131 | 53289 | 53446 | 193   |
| 87   | 53629    | 53786 | 53944 | 54101 | 54259 | 54416 | 54574 | 54731 | 54889 | 55046 | 194   |
| 88   | 55204    | 55361 | 55519 | 55676 | 55834 | 55991 | 56149 | 56306 | 56464 | 56621 | 195   |
| 89   | 56779    | 56936 | 57094 | 57251 | 57409 | 57566 | 57724 | 57881 | 58039 | 58196 | 196   |
| 2790 | 58354    | 58511 | 58669 | 58826 | 58984 | 59141 | 59299 | 59456 | 59614 | 59771 | 197   |
| 91   | 59929    | 60086 | 60244 | 60401 | 60559 | 60716 | 60874 | 61031 | 61189 | 61346 | 198   |
| 92   | 61504    | 61661 | 61819 | 61976 | 62134 | 62291 | 62449 | 62606 | 62764 | 62921 | 199   |
| 93   | 63079    | 63236 | 63394 | 63551 | 63709 | 63866 | 64024 | 64181 | 64339 | 64496 | 200   |
| 94   | 64654    | 64811 | 64969 | 65126 | 65284 | 65441 | 65599 | 65756 | 65914 | 66071 | 201   |
| 95   | 66229    | 66386 | 66544 | 66701 | 66859 | 67016 | 67174 | 67331 | 67489 | 67646 | 202   |
| 96   | 67804    | 67961 | 68119 | 68276 | 68434 | 68591 | 68749 | 68906 | 69064 | 69221 | 203   |
| 97   | 69379    | 69536 | 69694 | 69851 | 70009 | 70166 | 70324 | 70481 | 70639 | 70796 | 204   |
| 98   | 70964    | 71121 | 71279 | 71436 | 71594 | 71751 | 71909 | 72066 | 72224 | 72381 | 205   |
| 99   | 72544    | 72701 | 72859 | 73016 | 73174 | 73331 | 73489 | 73646 | 73804 | 73961 | 206   |
| 2800 | 74119    | 74276 | 74434 | 74591 | 74749 | 74906 | 75064 | 75221 | 75379 | 75536 | 207   |

| N.   | 0     | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     | P. P. |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 2790 | 75694 | 75851 | 76009 | 76166 | 76324 | 76481 | 76639 | 76796 | 76954 | 77111 | 208   |
| 91   | 77269 | 77426 | 77584 | 77741 | 77899 | 78056 | 78214 | 78371 | 78529 | 78686 | 209   |
| 92   | 78844 | 78999 | 79157 | 79314 | 79472 | 79629 | 79787 | 79944 | 80102 | 80259 | 210   |
| 93   | 80417 | 80574 | 80732 | 80889 | 81047 | 81204 | 81362 | 81519 | 81677 | 81834 | 211   |
| 94   | 81991 | 82149 | 82306 | 82464 | 82621 | 82779 | 82936 | 83094 | 83251 | 83409 | 212   |
| 95   | 83566 | 83724 | 83881 | 84039 | 84196 | 84354 | 84511 | 84669 | 84826 | 84984 | 213   |
| 96   | 85141 | 85299 | 85456 | 85614 | 85771 | 85929 | 86086 | 86244 | 86401 | 86559 | 214   |
| 97   | 86716 | 86874 | 87031 | 87189 | 87346 | 87504 | 87661 | 87819 | 87976 | 88134 | 215   |
| 98   | 88291 | 88449 | 88606 | 88764 | 88921 | 89079 | 89236 | 89394 | 89551 | 89709 | 216   |
| 99   | 89866 | 90024 | 90181 | 90339 | 90496 | 90654 | 90811 | 90969 | 91126 | 91284 | 217   |
| 2800 | 91441 | 91599 | 91756 | 91914 | 92072 | 92229 | 92387 | 92544 | 92702 | 92859 | 218   |







| N.   | 0        | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | P. P. |
|------|----------|------|------|------|------|------|------|------|------|------|-------|
| 2850 | 454 8449 | 8601 | 8753 | 8906 | 9058 | 9210 | 9363 | 9515 | 9668 | 9820 |       |
| 51   | 9972     | 5125 | 5277 | 5429 | 5581 | 5734 | 5886 | 6038 | 6191 | 6343 |       |
| 52   | 455 1495 | 1647 | 1800 | 1952 | 2104 | 2257 | 2409 | 2561 | 2713 | 2865 |       |
| 53   | 3018     | 3170 | 3322 | 3474 | 3627 | 3779 | 3931 | 4083 | 4235 | 4388 |       |
| 54   | 4540     | 4692 | 4844 | 4996 | 5148 | 5300 | 5453 | 5605 | 5757 | 5909 | 1     |
| 55   | 6061     | 6213 | 6365 | 6517 | 6670 | 6822 | 6974 | 7126 | 7278 | 7430 | 2     |
| 56   | 7582     | 7734 | 7886 | 8038 | 8190 | 8342 | 8494 | 8646 | 8798 | 8950 | 3     |
| 57   | 9102     | 9254 | 9406 | 9558 | 9710 | 9862 | 6014 | 5166 | 5318 | 5470 | 4     |
| 58   | 456 0622 | 0774 | 0926 | 1078 | 1230 | 1382 | 1534 | 1686 | 1838 | 1990 | 5     |
| 59   | 2142     | 2293 | 2445 | 2597 | 2749 | 2901 | 3053 | 3205 | 3357 | 3508 | 6     |
| 2860 | 3660     | 3812 | 3964 | 4116 | 4268 | 4420 | 4571 | 4723 | 4875 | 5027 | 7     |
| 61   | 5179     | 5330 | 5482 | 5634 | 5786 | 5938 | 6089 | 6241 | 6393 | 6545 | 8     |
| 62   | 6696     | 6848 | 7000 | 7152 | 7303 | 7455 | 7607 | 7758 | 7910 | 8062 | 9     |
| 63   | 8213     | 8365 | 8517 | 8669 | 8820 | 8972 | 9124 | 9275 | 9427 | 9578 |       |
| 64   | 9730     | 9882 | 5033 | 5185 | 5337 | 5488 | 5640 | 5791 | 5943 | 6095 |       |
| 65   | 457 1246 | 1398 | 1549 | 1701 | 1853 | 2004 | 2156 | 2307 | 2459 | 2610 | 1     |
| 66   | 2762     | 2913 | 3065 | 3216 | 3368 | 3519 | 3671 | 3822 | 3974 | 4125 | 2     |
| 67   | 4277     | 4428 | 4580 | 4731 | 4883 | 5034 | 5186 | 5337 | 5489 | 5640 | 3     |
| 68   | 5791     | 5943 | 6094 | 6246 | 6397 | 6549 | 6700 | 6851 | 7003 | 7154 | 4     |
| 69   | 7305     | 7457 | 7608 | 7760 | 7911 | 8062 | 8214 | 8365 | 8516 | 8668 | 5     |
| 2870 | 8819     | 8970 | 9122 | 9273 | 9424 | 9576 | 9727 | 9878 | 5029 | 5181 | 6     |
| 71   | 458 0332 | 0483 | 0634 | 0786 | 0937 | 1088 | 1239 | 1391 | 1542 | 1693 | 7     |
| 72   | 1844     | 1996 | 2147 | 2298 | 2449 | 2600 | 2752 | 2903 | 3054 | 3205 | 8     |
| 73   | 3356     | 3507 | 3659 | 3810 | 3961 | 4112 | 4263 | 4414 | 4565 | 4717 | 9     |
| 74   | 4868     | 5019 | 5170 | 5321 | 5472 | 5623 | 5774 | 5925 | 6076 | 6227 |       |
| 75   | 6378     | 6530 | 6681 | 6832 | 6983 | 7134 | 7285 | 7436 | 7587 | 7738 |       |
| 76   | 7889     | 8040 | 8191 | 8342 | 8493 | 8644 | 8795 | 8946 | 9097 | 9248 |       |
| 77   | 9399     | 9550 | 9701 | 9851 | 5002 | 5153 | 5304 | 5455 | 5606 | 5757 | 1     |
| 78   | 459 0908 | 1059 | 1210 | 1361 | 1511 | 1662 | 1813 | 1964 | 2115 | 2266 | 2     |
| 79   | 2417     | 2567 | 2718 | 2869 | 3020 | 3171 | 3322 | 3472 | 3623 | 3774 | 3     |
| 2880 | 3925     | 4076 | 4226 | 4377 | 4528 | 4679 | 4830 | 4980 | 5131 | 5282 | 4     |
| 81   | 5433     | 5583 | 5734 | 5885 | 6036 | 6186 | 6337 | 6488 | 6638 | 6789 | 5     |
| 82   | 6940     | 7090 | 7241 | 7392 | 7542 | 7693 | 7844 | 7994 | 8145 | 8296 | 6     |
| 83   | 8446     | 8597 | 8748 | 8898 | 9049 | 9200 | 9350 | 9501 | 9651 | 9802 | 7     |
| 84   | 9953     | 5103 | 5254 | 5404 | 5555 | 5705 | 5856 | 6007 | 6157 | 6308 | 8     |
| 85   | 460 1458 | 1609 | 1759 | 1910 | 2060 | 2211 | 2361 | 2512 | 2662 | 2813 | 9     |
| 86   | 2963     | 3114 | 3264 | 3415 | 3565 | 3716 | 3866 | 4017 | 4167 | 4317 |       |
| 87   | 4468     | 4618 | 4769 | 4919 | 5070 | 5220 | 5370 | 5521 | 5671 | 5822 |       |
| 88   | 5972     | 6122 | 6273 | 6423 | 6573 | 6724 | 6874 | 7024 | 7175 | 7325 |       |
| 89   | 7475     | 7626 | 7776 | 7926 | 8077 | 8227 | 8377 | 8528 | 8678 | 8828 |       |
| 2890 | 8978     | 9129 | 9279 | 9429 | 9579 | 9730 | 9880 | 5030 | 5180 | 5331 | 1     |
| 91   | 461 0481 | 0631 | 0781 | 0932 | 1082 | 1232 | 1382 | 1532 | 1683 | 1833 | 2     |
| 92   | 1983     | 2133 | 2283 | 2433 | 2584 | 2734 | 2884 | 3034 | 3184 | 3334 | 3     |
| 93   | 3484     | 3634 | 3785 | 3935 | 4085 | 4235 | 4385 | 4535 | 4685 | 4835 | 4     |
| 94   | 4985     | 5135 | 5285 | 5435 | 5585 | 5736 | 5886 | 6036 | 6186 | 6336 | 5     |
| 95   | 6486     | 6636 | 6786 | 6936 | 7086 | 7236 | 7386 | 7536 | 7686 | 7836 | 6     |
| 96   | 7986     | 8136 | 8285 | 8435 | 8585 | 8735 | 8885 | 9035 | 9185 | 9335 | 7     |
| 97   | 9485     | 9635 | 9785 | 9935 | 5085 | 5234 | 5384 | 5534 | 5684 | 5834 | 8     |
| 98   | 462 0984 | 1134 | 1284 | 1433 | 1583 | 1733 | 1883 | 2033 | 2183 | 2332 | 9     |
| 99   | 2482     | 2632 | 2782 | 2932 | 3081 | 3231 | 3381 | 3531 | 3680 | 3830 |       |
| 2900 | 3980     | 4130 | 4279 | 4429 | 4579 | 4729 | 4878 | 5028 | 5178 | 5328 |       |

| N. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | P. P. |
|----|---|---|---|---|---|---|---|---|---|---|-------|
|----|---|---|---|---|---|---|---|---|---|---|-------|

|       |             |      |              |          |      |         |
|-------|-------------|------|--------------|----------|------|---------|
| 28500 | = 7° 55' 0" | 2850 | = 0° 47' 30" | S. 4.685 | 5610 | T. 6025 |
| 28600 | = 7 56 40   | 2860 | = 0 47 40    |          | 5610 | 6027    |
| 28700 | = 7 58 20   | 2870 | = 0 47 50    |          | 5609 | 6029    |
| 28800 | = 8 0 0     | 2880 | = 0 48 0     |          | 5608 | 6031    |
| 28900 | = 8 1 40    | 2890 | = 0 48 10    |          | 5607 | 6033    |



| N.       | 0               | 1               | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     | P. 1. |
|----------|-----------------|-----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 2900     | 462 3980        | 4130            | 4279  | 4420  | 4579  | 4739  | 4898  | 5057  | 5216  | 5375  |       |
| 01       | 5477            | 5627            | 5777  | 5926  | 6076  | 6226  | 6375  | 6525  | 6674  | 6823  |       |
| 02       | 6974            | 7123            | 7273  | 7423  | 7573  | 7722  | 7872  | 8021  | 8171  | 8320  |       |
| 03       | 8470            | 8620            | 8770  | 8919  | 9069  | 9218  | 9367  | 9516  | 9665  | 9814  |       |
| 04       | 9966            | 10116           | 10265 | 10415 | 10564 | 10714 | 10863 | 11012 | 11161 | 11310 |       |
| 05       | 463 1461        | 1611            | 1760  | 1910  | 2059  | 2209  | 2358  | 2507  | 2656  | 2805  |       |
| 06       | 2956            | 3106            | 3255  | 3404  | 3554  | 3703  | 3852  | 3999  | 4148  | 4297  |       |
| 07       | 4450            | 4600            | 4749  | 4898  | 5048  | 5197  | 5346  | 5495  | 5644  | 5793  |       |
| 08       | 5944            | 6093            | 6243  | 6392  | 6541  | 6690  | 6839  | 6988  | 7137  | 7286  |       |
| 09       | 7437            | 7587            | 7736  | 7885  | 8034  | 8183  | 8332  | 8481  | 8630  | 8779  |       |
| 2910     | 8930            | 9079            | 9228  | 9378  | 9527  | 9676  | 9825  | 9974  | 10123 | 10272 |       |
| 11       | 464 0422        | 0571            | 0720  | 0870  | 1019  | 1168  | 1317  | 1466  | 1615  | 1764  |       |
| 12       | 1914            | 2063            | 2213  | 2362  | 2511  | 2660  | 2809  | 2958  | 3107  | 3256  |       |
| 13       | 3405            | 3554            | 3703  | 3852  | 3999  | 4148  | 4297  | 4446  | 4595  | 4744  |       |
| 14       | 4895            | 5045            | 5194  | 5343  | 5492  | 5641  | 5790  | 5939  | 6088  | 6237  |       |
| 15       | 6386            | 6535            | 6684  | 6833  | 6982  | 7131  | 7280  | 7429  | 7578  | 7727  |       |
| 16       | 7875            | 8024            | 8173  | 8322  | 8471  | 8620  | 8769  | 8918  | 9067  | 9216  |       |
| 17       | 9365            | 9514            | 9663  | 9812  | 9961  | 10110 | 10259 | 10408 | 10557 | 10706 |       |
| 18       | 465 0853        | 1002            | 1151  | 1300  | 1449  | 1598  | 1747  | 1896  | 2045  | 2194  |       |
| 19       | 2341            | 2490            | 2639  | 2788  | 2937  | 3086  | 3235  | 3384  | 3533  | 3682  |       |
| 2920     | 3820            | 3977            | 4126  | 4275  | 4424  | 4573  | 4722  | 4871  | 5020  | 5169  |       |
| 21       | 5316            | 5465            | 5614  | 5763  | 5912  | 6061  | 6210  | 6359  | 6508  | 6657  |       |
| 22       | 6802            | 6951            | 7099  | 7248  | 7397  | 7546  | 7695  | 7844  | 7993  | 8142  |       |
| 23       | 8388            | 8537            | 8685  | 8834  | 8983  | 9132  | 9281  | 9430  | 9579  | 9728  |       |
| 24       | 9774            | 9922            | 10071 | 10220 | 10369 | 10518 | 10667 | 10816 | 10965 | 11114 |       |
| 25       | 466 1259        | 1407            | 1556  | 1705  | 1854  | 2003  | 2152  | 2301  | 2450  | 2599  |       |
| 26       | 2743            | 2892            | 3040  | 3188  | 3337  | 3486  | 3635  | 3784  | 3933  | 4082  |       |
| 27       | 4227            | 4376            | 4524  | 4673  | 4821  | 4970  | 5119  | 5268  | 5417  | 5566  |       |
| 28       | 5711            | 5859            | 6007  | 6156  | 6304  | 6453  | 6602  | 6751  | 6899  | 7048  |       |
| 29       | 7194            | 7342            | 7490  | 7639  | 7787  | 7936  | 8085  | 8234  | 8383  | 8531  |       |
| 2930     | 8676            | 8824            | 8973  | 9121  | 9270  | 9418  | 9567  | 9716  | 9865  | 10014 |       |
| 31       | 467 0158        | 0306            | 0455  | 0603  | 0752  | 0900  | 1049  | 1197  | 1346  | 1494  |       |
| 32       | 1640            | 1788            | 1936  | 2085  | 2233  | 2382  | 2530  | 2679  | 2827  | 2976  |       |
| 33       | 3121            | 3269            | 3417  | 3565  | 3714  | 3862  | 4010  | 4159  | 4307  | 4456  |       |
| 34       | 4601            | 4749            | 4897  | 5045  | 5193  | 5341  | 5489  | 5637  | 5785  | 5934  |       |
| 35       | 6081            | 6229            | 6377  | 6525  | 6673  | 6821  | 6969  | 7117  | 7265  | 7414  |       |
| 36       | 7561            | 7708            | 7856  | 8004  | 8152  | 8300  | 8448  | 8596  | 8744  | 8892  |       |
| 37       | 9039            | 9187            | 9335  | 9483  | 9631  | 9779  | 9927  | 10075 | 10223 | 10371 |       |
| 38       | 468 0318        | 0466            | 0614  | 0762  | 0910  | 1058  | 1206  | 1354  | 1502  | 1650  |       |
| 39       | 1996            | 2144            | 2291  | 2439  | 2587  | 2735  | 2882  | 3030  | 3178  | 3326  |       |
| 2940     | 3473            | 3621            | 3769  | 3916  | 4064  | 4212  | 4360  | 4507  | 4655  | 4803  |       |
| 41       | 4950            | 5098            | 5246  | 5394  | 5541  | 5689  | 5837  | 5984  | 6132  | 6280  |       |
| 42       | 6427            | 6574            | 6722  | 6870  | 7017  | 7165  | 7312  | 7460  | 7607  | 7755  |       |
| 43       | 7903            | 8050            | 8198  | 8345  | 8492  | 8640  | 8787  | 8934  | 9081  | 9229  |       |
| 44       | 9378            | 9526            | 9673  | 9821  | 9968  | 10116 | 10263 | 10410 | 10558 | 10705 |       |
| 45       | 469 0853        | 1000            | 1148  | 1295  | 1443  | 1590  | 1737  | 1885  | 2032  | 2180  |       |
| 46       | 2327            | 2475            | 2622  | 2770  | 2917  | 3064  | 3212  | 3359  | 3506  | 3654  |       |
| 47       | 3801            | 3949            | 4096  | 4243  | 4391  | 4538  | 4685  | 4832  | 4979  | 5127  |       |
| 48       | 5275            | 5423            | 5569  | 5717  | 5864  | 6011  | 6158  | 6305  | 6452  | 6599  |       |
| 49       | 6748            | 6895            | 7042  | 7189  | 7337  | 7484  | 7631  | 7778  | 7925  | 8072  |       |
| 2950     | 8220            | 8367            | 8515  | 8662  | 8809  | 8956  | 9103  | 9250  | 9397  | 9544  |       |
| N.       | 0               | 1               | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     | P. 1. |
| 29000 == | 8 <sup>3</sup>  | 3 <sup>10</sup> |       |       |       |       |       |       |       |       |       |
| 29100 == | 8 <sup>5</sup>  | 5 <sup>0</sup>  |       |       |       |       |       |       |       |       |       |
| 29200 == | 8 <sup>6</sup>  | 6 <sup>40</sup> |       |       |       |       |       |       |       |       |       |
| 29300 == | 8 <sup>8</sup>  | 8 <sup>20</sup> |       |       |       |       |       |       |       |       |       |
| 29400 == | 8 <sup>10</sup> | 0               |       |       |       |       |       |       |       |       |       |



| N.   | 0        | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9     | P. P. |
|------|----------|------|------|------|------|------|------|------|------|-------|-------|
| 2950 | 469 3220 | 8367 | 8388 | 8662 | 8709 | 8856 | 9103 | 9241 | 9398 | 9545  |       |
| 51   | 9692     | 9839 | 9986 | 0133 | 0281 | 0428 | 0575 | 0722 | 0869 | 1016  |       |
| 52   | 470 1164 | 1311 | 1458 | 1605 | 1752 | 1899 | 2046 | 2193 | 2340 | 2487  |       |
| 53   | 2614     | 2752 | 2899 | 3046 | 3193 | 3340 | 3487 | 3634 | 3781 | 3928  |       |
| 54   | 4805     | 4952 | 5099 | 5246 | 5393 | 5540 | 5687 | 5834 | 5981 | 6128  | 147   |
| 55   | 5455     | 5602 | 5749 | 5896 | 6043 | 6190 | 6337 | 6484 | 6631 | 6778  | 147   |
| 56   | 7014     | 7161 | 7308 | 7455 | 7602 | 7749 | 7896 | 8043 | 8190 | 8337  | 147   |
| 57   | 8384     | 8531 | 8678 | 8825 | 8972 | 9119 | 9266 | 9413 | 9560 | 9707  | 147   |
| 58   | 9932     | 0079 | 0226 | 0373 | 0520 | 0667 | 0814 | 0961 | 1108 | 1255  | 147   |
| 59   | 1314     | 1461 | 1608 | 1755 | 1902 | 2049 | 2196 | 2343 | 2490 | 2637  | 147   |
| 2960 | 5917     | 6064 | 6211 | 6358 | 6505 | 6652 | 6799 | 6946 | 7093 | 7240  |       |
| 61   | 4181     | 4328 | 4475 | 4622 | 4769 | 4916 | 5063 | 5210 | 5357 | 5504  |       |
| 62   | 5851     | 5998 | 6145 | 6292 | 6439 | 6586 | 6733 | 6880 | 7027 | 7174  |       |
| 63   | 7442     | 7589 | 7736 | 7883 | 8030 | 8177 | 8324 | 8471 | 8618 | 8765  |       |
| 64   | 8952     | 9099 | 9246 | 9393 | 9540 | 9687 | 9834 | 9981 | 0128 | 0275  |       |
| 65   | 420 0312 | 0459 | 0606 | 0753 | 0899 | 1046 | 1193 | 1340 | 1487 | 1634  |       |
| 66   | 1211     | 1358 | 1505 | 1652 | 1799 | 1946 | 2093 | 2240 | 2387 | 2534  |       |
| 67   | 1805     | 1952 | 2099 | 2246 | 2393 | 2540 | 2687 | 2834 | 2981 | 3128  | 116   |
| 68   | 3209     | 3356 | 3503 | 3650 | 3797 | 3944 | 4091 | 4238 | 4385 | 4532  | 116   |
| 69   | 6013     | 6160 | 6307 | 6454 | 6601 | 6748 | 6895 | 7042 | 7189 | 7336  | 116   |
| 2970 | 7592     | 7739 | 7886 | 8033 | 8180 | 8327 | 8474 | 8621 | 8768 | 8915  |       |
| 71   | 9202     | 9349 | 9496 | 9643 | 9790 | 9937 | 0084 | 0231 | 0378 | 0525  |       |
| 72   | 421 0458 | 0605 | 0752 | 0899 | 1046 | 1193 | 1340 | 1487 | 1634 | 1781  |       |
| 73   | 1949     | 2096 | 2243 | 2390 | 2537 | 2684 | 2831 | 2978 | 3125 | 3272  |       |
| 74   | 4305     | 4452 | 4599 | 4746 | 4893 | 5040 | 5187 | 5334 | 5481 | 5628  |       |
| 75   | 4909     | 5056 | 5203 | 5350 | 5497 | 5644 | 5791 | 5938 | 6085 | 6232  |       |
| 76   | 6409     | 6556 | 6703 | 6850 | 6997 | 7144 | 7291 | 7438 | 7585 | 7732  |       |
| 77   | 7888     | 8035 | 8182 | 8329 | 8476 | 8623 | 8770 | 8917 | 9064 | 9211  |       |
| 78   | 9312     | 9459 | 9606 | 9753 | 9899 | 0046 | 0193 | 0340 | 0487 | 0634  |       |
| 79   | 422 0703 | 0850 | 0997 | 1144 | 1291 | 1438 | 1585 | 1732 | 1879 | 2026  |       |
| 2980 | 2461     | 2608 | 2755 | 2902 | 3049 | 3196 | 3343 | 3490 | 3637 | 3784  |       |
| 81   | 2805     | 2952 | 3099 | 3246 | 3393 | 3540 | 3687 | 3834 | 3981 | 4128  |       |
| 82   | 3105     | 3252 | 3399 | 3546 | 3693 | 3840 | 3987 | 4134 | 4281 | 4428  |       |
| 83   | 3505     | 3652 | 3799 | 3946 | 4093 | 4240 | 4387 | 4534 | 4681 | 4828  |       |
| 84   | 3905     | 4052 | 4199 | 4346 | 4493 | 4640 | 4787 | 4934 | 5081 | 5228  |       |
| 85   | 4305     | 4452 | 4599 | 4746 | 4893 | 5040 | 5187 | 5334 | 5481 | 5628  |       |
| 86   | 4705     | 4852 | 4999 | 5146 | 5293 | 5440 | 5587 | 5734 | 5881 | 6028  |       |
| 87   | 5105     | 5252 | 5399 | 5546 | 5693 | 5840 | 5987 | 6134 | 6281 | 6428  |       |
| 88   | 5505     | 5652 | 5799 | 5946 | 6093 | 6240 | 6387 | 6534 | 6681 | 6828  |       |
| 89   | 5905     | 6052 | 6199 | 6346 | 6493 | 6640 | 6787 | 6934 | 7081 | 7228  |       |
| 2990 | 6305     | 6452 | 6599 | 6746 | 6893 | 7040 | 7187 | 7334 | 7481 | 7628  |       |
| 91   | 6705     | 6852 | 6999 | 7146 | 7293 | 7440 | 7587 | 7734 | 7881 | 8028  |       |
| 92   | 7105     | 7252 | 7399 | 7546 | 7693 | 7840 | 7987 | 8134 | 8281 | 8428  |       |
| 93   | 7505     | 7652 | 7799 | 7946 | 8093 | 8240 | 8387 | 8534 | 8681 | 8828  |       |
| 94   | 7905     | 8052 | 8199 | 8346 | 8493 | 8640 | 8787 | 8934 | 9081 | 9228  |       |
| 95   | 8305     | 8452 | 8599 | 8746 | 8893 | 9040 | 9187 | 9334 | 9481 | 9628  |       |
| 96   | 8705     | 8852 | 8999 | 9146 | 9293 | 9440 | 9587 | 9734 | 9881 | 10028 |       |
| 97   | 9105     | 9252 | 9399 | 9546 | 9693 | 9840 | 9987 | 0134 | 0281 | 0428  |       |
| 98   | 9505     | 9652 | 9799 | 9946 | 0093 | 0240 | 0387 | 0534 | 0681 | 0828  |       |
| 99   | 9905     | 0052 | 0199 | 0346 | 0493 | 0640 | 0787 | 0934 | 1081 | 1228  |       |
| 3000 | 472 1312 | 1459 | 1606 | 1753 | 1900 | 2047 | 2194 | 2341 | 2488 | 2635  |       |

| N.    | 0 | 1       | 2 | 3 | 4 | 5     | 6 | 7       | 8        | 9     | P. P. |
|-------|---|---------|---|---|---|-------|---|---------|----------|-------|-------|
| 19900 | — | 3 11 40 |   |   |   | 29900 | — | 0 49 10 | 3 4 48 5 | 10015 | 10015 |
| 19901 | — | 3 11 40 |   |   |   | 29901 | — | 0 49 10 | 3 4 48 5 | 10016 | 10016 |
| 19902 | — | 3 11 40 |   |   |   | 29902 | — | 0 49 10 | 3 4 48 5 | 10017 | 10017 |
| 19903 | — | 3 11 40 |   |   |   | 29903 | — | 0 49 10 | 3 4 48 5 | 10018 | 10018 |
| 19904 | — | 3 11 40 |   |   |   | 29904 | — | 0 49 10 | 3 4 48 5 | 10019 | 10019 |
| 19905 | — | 3 11 40 |   |   |   | 29905 | — | 0 49 10 | 3 4 48 5 | 10020 | 10020 |
| 19906 | — | 3 11 40 |   |   |   | 29906 | — | 0 49 10 | 3 4 48 5 | 10021 | 10021 |
| 19907 | — | 3 11 40 |   |   |   | 29907 | — | 0 49 10 | 3 4 48 5 | 10022 | 10022 |
| 19908 | — | 3 11 40 |   |   |   | 29908 | — | 0 49 10 | 3 4 48 5 | 10023 | 10023 |
| 19909 | — | 3 11 40 |   |   |   | 29909 | — | 0 49 10 | 3 4 48 5 | 10024 | 10024 |



| N.    | 0           | 1     | 2     | 3     | 4     | 5           | 6        | 7     | 8       | 9     | P. P. |
|-------|-------------|-------|-------|-------|-------|-------------|----------|-------|---------|-------|-------|
| 3000  | 477 1213    | 1357  | 1502  | 1647  | 1792  | 1936        | 2081     | 2226  | 2371    | 2515  |       |
| 01    | 2660        | 2805  | 2949  | 3094  | 3239  | 3383        | 3528     | 3673  | 3818    | 3962  |       |
| 02    | 4107        | 4252  | 4396  | 4541  | 4686  | 4830        | 4975     | 5119  | 5264    | 5409  |       |
| 03    | 5553        | 5698  | 5843  | 5987  | 6132  | 6276        | 6421     | 6566  | 6710    | 6855  | 145   |
| 04    | 6999        | 7144  | 7288  | 7433  | 7578  | 7722        | 7867     | 8011  | 8156    | 8300  | 1     |
| 05    | 8445        | 8589  | 8734  | 8878  | 9023  | 9167        | 9312     | 9456  | 9601    | 9745  | 2     |
| 06    | 9890        | 10034 | 10179 | 10323 | 10468 | 10612       | 10757    | 10901 | 11045   | 11190 | 3     |
| 07    | 478 1334    | 1479  | 1623  | 1768  | 1912  | 2056        | 2201     | 2345  | 2490    | 2634  | 4     |
| 08    | 2778        | 2923  | 3067  | 3211  | 3356  | 3500        | 3645     | 3789  | 3933    | 4078  | 5     |
| 09    | 4222        | 4366  | 4511  | 4655  | 4799  | 4943        | 5088     | 5232  | 5376    | 5521  | 6     |
| 3010  | 478 5665    | 5809  | 5954  | 6098  | 6242  | 6386        | 6531     | 6675  | 6819    | 6963  | 7     |
| 11    | 7108        | 7252  | 7396  | 7540  | 7684  | 7829        | 7973     | 8117  | 8261    | 8405  | 8     |
| 12    | 8550        | 8694  | 8838  | 8982  | 9126  | 9271        | 9415     | 9559  | 9703    | 9847  | 9     |
| 13    | 9991        | 10135 | 10280 | 10424 | 10568 | 10712       | 10856    | 11000 | 11144   | 11288 | 130.5 |
| 14    | 479 1432    | 1577  | 1721  | 1865  | 2009  | 2153        | 2297     | 2441  | 2585    | 2729  |       |
| 15    | 2873        | 3017  | 3161  | 3305  | 3449  | 3593        | 3737     | 3881  | 4025    | 4169  |       |
| 16    | 4313        | 4457  | 4601  | 4745  | 4889  | 5033        | 5177     | 5321  | 5465    | 5609  | 144   |
| 17    | 5753        | 5897  | 6041  | 6185  | 6329  | 6473        | 6617     | 6761  | 6905    | 7048  | 1     |
| 18    | 7192        | 7336  | 7480  | 7624  | 7768  | 7912        | 8056     | 8200  | 8343    | 8487  | 2     |
| 19    | 8631        | 8775  | 8919  | 9063  | 9207  | 9350        | 9494     | 9638  | 9782    | 9926  | 3     |
| 3020  | 480 0069    | 0213  | 0357  | 0501  | 0645  | 0788        | 0932     | 1076  | 1220    | 1363  | 4     |
| 21    | 1507        | 1651  | 1795  | 1939  | 2082  | 2226        | 2370     | 2513  | 2657    | 2801  | 5     |
| 22    | 2945        | 3088  | 3232  | 3376  | 3519  | 3663        | 3807     | 3950  | 4094    | 4238  | 6     |
| 23    | 4381        | 4525  | 4669  | 4812  | 4956  | 5100        | 5243     | 5387  | 5531    | 5674  | 7     |
| 24    | 5818        | 5961  | 6105  | 6249  | 6392  | 6536        | 6679     | 6823  | 6967    | 7110  | 8     |
| 25    | 7254        | 7397  | 7541  | 7684  | 7828  | 7972        | 8115     | 8259  | 8402    | 8546  | 9     |
| 26    | 8689        | 8833  | 8976  | 9120  | 9263  | 9407        | 9550     | 9694  | 9837    | 9981  |       |
| 27    | 481 0124    | 0268  | 0411  | 0555  | 0698  | 0842        | 0985     | 1128  | 1272    | 1415  | 148   |
| 28    | 1559        | 1702  | 1846  | 1989  | 2132  | 2276        | 2419     | 2563  | 2706    | 2849  | 1     |
| 29    | 2993        | 3136  | 3279  | 3423  | 3566  | 3710        | 3853     | 3996  | 4140    | 4283  | 2     |
| 3030  | 481 4426    | 4570  | 4713  | 4856  | 5000  | 5143        | 5286     | 5429  | 5573    | 5716  | 3     |
| 31    | 5859        | 6003  | 6146  | 6289  | 6432  | 6576        | 6719     | 6862  | 7005    | 7149  | 4     |
| 32    | 7292        | 7435  | 7578  | 7722  | 7865  | 8008        | 8151     | 8295  | 8438    | 8581  | 5     |
| 33    | 8724        | 8867  | 9010  | 9154  | 9297  | 9440        | 9583     | 9726  | 9869    | 10013 | 6     |
| 34    | 482 0156    | 0299  | 0442  | 0585  | 0728  | 0871        | 1015     | 1158  | 1301    | 1444  | 7     |
| 35    | 1587        | 1730  | 1873  | 2016  | 2159  | 2302        | 2445     | 2589  | 2732    | 2875  | 8     |
| 36    | 3018        | 3161  | 3304  | 3447  | 3590  | 3733        | 3876     | 4019  | 4162    | 4305  | 9     |
| 37    | 4448        | 4591  | 4734  | 4877  | 5020  | 5163        | 5306     | 5449  | 5592    | 5735  |       |
| 38    | 5878        | 6021  | 6164  | 6307  | 6449  | 6592        | 6735     | 6878  | 7021    | 7164  |       |
| 39    | 7307        | 7450  | 7593  | 7736  | 7879  | 8021        | 8164     | 8307  | 8450    | 8593  |       |
| 3040  | 482 8736    | 8879  | 9022  | 9164  | 9307  | 9450        | 9593     | 9736  | 9879    | 10021 | 142   |
| 41    | 483 0164    | 0307  | 0450  | 0593  | 0735  | 0878        | 1021     | 1164  | 1307    | 1449  | 1     |
| 42    | 1592        | 1735  | 1878  | 2020  | 2163  | 2306        | 2449     | 2591  | 2734    | 2877  | 2     |
| 43    | 3020        | 3162  | 3305  | 3448  | 3590  | 3733        | 3876     | 4018  | 4161    | 4304  | 3     |
| 44    | 4446        | 4589  | 4732  | 4874  | 5017  | 5160        | 5302     | 5445  | 5588    | 5730  | 4     |
| 45    | 5873        | 6016  | 6158  | 6301  | 6443  | 6586        | 6729     | 6871  | 7014    | 7156  | 5     |
| 46    | 7299        | 7442  | 7584  | 7727  | 7869  | 8012        | 8154     | 8297  | 8439    | 8582  | 6     |
| 47    | 8725        | 8867  | 9010  | 9152  | 9295  | 9437        | 9580     | 9722  | 9865    | 10007 | 7     |
| 48    | 484 0150    | 0292  | 0435  | 0577  | 0720  | 0862        | 1004     | 1147  | 1289    | 1432  | 8     |
| 49    | 1574        | 1717  | 1859  | 2002  | 2144  | 2286        | 2429     | 2571  | 2714    | 2856  | 9     |
| 3050  | 484 2998    | 3141  | 3283  | 3426  | 3568  | 3710        | 3853     | 3995  | 4137    | 4280  |       |
| N.    | 0           | 1     | 2     | 3     | 4     | 5           | 6        | 7     | 8       | 9     | P. P. |
| 30000 | = 8° 20' 0" |       |       |       | 30000 | = 0° 50' 0" | S. 4.685 | 5596  | T. 6055 |       |       |
| 30100 | = 8 21 40   |       |       |       | 30100 | = 0 50 10   |          | 5595  | 6057    |       |       |
| 30200 | = 8 23 20   |       |       |       | 30200 | = 0 50 20   |          | 5594  | 6059    |       |       |
| 30300 | = 8 25 0    |       |       |       | 30300 | = 0 50 30   |          | 5592  | 6061    |       |       |
| 30400 | = 8 26 40   |       |       |       | 30400 | = 0 50 40   |          | 5591  | 6063    |       |       |







| N.   | 0        | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     | P. P.   |
|------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------|
| 3100 | 491 3617 | 3757  | 3897  | 4037  | 4177  | 4317  | 4457  | 4597  | 4738  | 4878  |         |
| 01   | 5018     | 5158  | 5298  | 5438  | 5578  | 5718  | 5858  | 5998  | 6138  | 6278  |         |
| 02   | 6418     | 6558  | 6698  | 6838  | 6978  | 7118  | 7258  | 7398  | 7538  | 7678  |         |
| 03   | 7818     | 7958  | 8098  | 8238  | 8378  | 8517  | 8657  | 8797  | 8937  | 9077  | 141     |
| 04   | 9217     | 9357  | 9497  | 9637  | 9777  | 9917  | 10057 | 10196 | 10336 | 10476 | 1 14.1  |
| 05   | 492 0616 | 0756  | 0896  | 1036  | 1175  | 1315  | 1455  | 1595  | 1735  | 1875  | 2 28.2  |
| 06   | 2015     | 2154  | 2294  | 2434  | 2574  | 2714  | 2853  | 2993  | 3133  | 3273  | 3 42.3  |
| 07   | 3413     | 3552  | 3692  | 3832  | 3972  | 4111  | 4251  | 4391  | 4531  | 4670  | 4 56.4  |
| 08   | 4810     | 4950  | 5090  | 5229  | 5369  | 5509  | 5648  | 5788  | 5928  | 6068  | 5 70.5  |
| 09   | 6207     | 6347  | 6487  | 6626  | 6766  | 6906  | 7045  | 7185  | 7325  | 7464  | 6 84.6  |
| 3110 | 492 7604 | 7744  | 7883  | 8023  | 8162  | 8302  | 8442  | 8581  | 8721  | 8861  | 7 98.7  |
| 11   | 9000     | 9140  | 9279  | 9419  | 9558  | 9698  | 9838  | 9977  | 10117 | 10256 | 8 112.8 |
| 12   | 493 0396 | 0535  | 0675  | 0815  | 0954  | 1094  | 1233  | 1373  | 1512  | 1652  | 9 126.9 |
| 13   | 1791     | 1931  | 2070  | 2210  | 2349  | 2489  | 2628  | 2768  | 2907  | 3047  |         |
| 14   | 3186     | 3326  | 3465  | 3604  | 3744  | 3883  | 4023  | 4162  | 4302  | 4441  |         |
| 15   | 4581     | 4720  | 4859  | 4999  | 5138  | 5278  | 5417  | 5556  | 5696  | 5835  | 140     |
| 16   | 5974     | 6114  | 6253  | 6393  | 6532  | 6671  | 6811  | 6950  | 7089  | 7229  | 1 14.0  |
| 17   | 7368     | 7507  | 7647  | 7786  | 7925  | 8065  | 8204  | 8343  | 8483  | 8622  | 2 28.0  |
| 18   | 8761     | 8900  | 9040  | 9179  | 9318  | 9457  | 9597  | 9736  | 9875  | 10015 | 3 42.0  |
| 19   | 494 0154 | 0293  | 0432  | 0571  | 0711  | 0850  | 0989  | 1128  | 1268  | 1407  | 4 56.0  |
| 3120 | 494 1546 | 1685  | 1824  | 1964  | 2103  | 2242  | 2381  | 2520  | 2659  | 2799  | 5 70.0  |
| 21   | 2938     | 3077  | 3216  | 3355  | 3494  | 3633  | 3773  | 3912  | 4051  | 4190  | 6 84.0  |
| 22   | 4329     | 4468  | 4607  | 4746  | 4885  | 5024  | 5164  | 5303  | 5442  | 5581  | 7 98.0  |
| 23   | 5720     | 5859  | 5998  | 6137  | 6276  | 6415  | 6554  | 6693  | 6832  | 6971  | 8 112.0 |
| 24   | 7110     | 7249  | 7388  | 7527  | 7666  | 7805  | 7944  | 8083  | 8222  | 8361  | 9 126.0 |
| 25   | 8500     | 8639  | 8778  | 8917  | 9056  | 9195  | 9334  | 9473  | 9612  | 9751  |         |
| 26   | 9890     | 10029 | 10168 | 10307 | 10445 | 10584 | 10723 | 10862 | 11001 | 11140 |         |
| 27   | 495 1279 | 1418  | 1557  | 1695  | 1834  | 1973  | 2112  | 2251  | 2390  | 2529  | 139     |
| 28   | 2667     | 2806  | 2945  | 3084  | 3223  | 3362  | 3500  | 3639  | 3778  | 3917  | 1 13.9  |
| 29   | 4056     | 4194  | 4333  | 4472  | 4611  | 4750  | 4888  | 5027  | 5166  | 5305  | 2 27.8  |
| 3130 | 495 5443 | 5582  | 5721  | 5860  | 5998  | 6137  | 6276  | 6415  | 6553  | 6692  | 3 41.7  |
| 31   | 6831     | 6969  | 7108  | 7247  | 7385  | 7524  | 7663  | 7802  | 7940  | 8079  | 4 55.6  |
| 32   | 8218     | 8356  | 8495  | 8634  | 8772  | 8911  | 9049  | 9188  | 9327  | 9465  | 5 69.5  |
| 33   | 9604     | 9743  | 9881  | 10020 | 10158 | 10297 | 10436 | 10574 | 10713 | 10851 | 6 83.4  |
| 34   | 496 0990 | 1128  | 1267  | 1406  | 1544  | 1683  | 1821  | 1960  | 2098  | 2237  | 7 97.3  |
| 35   | 2375     | 2514  | 2653  | 2791  | 2930  | 3068  | 3207  | 3345  | 3484  | 3622  | 8 111.2 |
| 36   | 3761     | 3899  | 4038  | 4176  | 4314  | 4453  | 4591  | 4730  | 4868  | 5007  | 9 125.1 |
| 37   | 5145     | 5284  | 5422  | 5560  | 5699  | 5837  | 5976  | 6114  | 6253  | 6391  |         |
| 38   | 6529     | 6668  | 6806  | 6945  | 7083  | 7221  | 7360  | 7498  | 7636  | 7775  |         |
| 39   | 7913     | 8052  | 8190  | 8328  | 8467  | 8605  | 8743  | 8882  | 9020  | 9158  |         |
| 3140 | 496 9296 | 9435  | 9573  | 9711  | 9850  | 9988  | 10126 | 10265 | 10403 | 10541 | 138     |
| 41   | 497 0679 | 0818  | 0956  | 1094  | 1232  | 1371  | 1509  | 1647  | 1785  | 1924  | 1 13.8  |
| 42   | 2062     | 2200  | 2338  | 2476  | 2615  | 2753  | 2891  | 3029  | 3167  | 3306  | 2 27.6  |
| 43   | 3444     | 3582  | 3720  | 3858  | 3996  | 4135  | 4273  | 4411  | 4549  | 4687  | 3 41.4  |
| 44   | 4825     | 4964  | 5102  | 5240  | 5378  | 5516  | 5654  | 5792  | 5930  | 6068  | 4 55.2  |
| 45   | 6206     | 6345  | 6483  | 6621  | 6759  | 6897  | 7035  | 7173  | 7311  | 7449  | 5 69.0  |
| 46   | 7587     | 7725  | 7863  | 8001  | 8139  | 8277  | 8415  | 8553  | 8691  | 8829  | 6 82.8  |
| 47   | 8967     | 9105  | 9243  | 9381  | 9519  | 9657  | 9795  | 9933  | 10071 | 10209 | 7 96.6  |
| 48   | 498 0347 | 0485  | 0623  | 0761  | 0899  | 1037  | 1175  | 1313  | 1451  | 1589  | 8 110.4 |
| 49   | 1727     | 1865  | 2002  | 2140  | 2278  | 2416  | 2554  | 2692  | 2830  | 2968  | 9 124.2 |
| 3150 | 498 3106 | 3243  | 3381  | 3519  | 3657  | 3795  | 3933  | 4071  | 4208  | 4346  |         |

| N.    | 0            | 1 | 2 | 3 | 4 | 5     | 6            | 7      | 8    | 9       | P. P. |
|-------|--------------|---|---|---|---|-------|--------------|--------|------|---------|-------|
| 31000 | = 8° 36' 40" |   |   |   |   | 31000 | = 0° 51' 40" | 8.4685 | 5585 | T. 6076 |       |
| 31100 | = 8 38 20    |   |   |   |   | 31100 | = 0 51 50    |        | 5584 | 6078    |       |
| 31200 | = 8 40 0     |   |   |   |   | 31200 | = 0 52 0     |        | 5583 | 6080    |       |
| 31300 | = 8 41 40    |   |   |   |   | 31300 | = 0 52 10    |        | 5582 | 6082    |       |



| N.   | 0        | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | P. P.   |
|------|----------|------|------|------|------|------|------|------|------|------|---------|
| 8150 | 498 3106 | 3243 | 3381 | 3519 | 3657 | 3795 | 3933 | 4071 | 4208 | 4346 |         |
| 51   | 4484     | 4622 | 4760 | 4897 | 5035 | 5173 | 5311 | 5449 | 5587 | 5724 |         |
| 52   | 5862     | 6000 | 6138 | 6275 | 6413 | 6551 | 6689 | 6826 | 6964 | 7102 |         |
| 53   | 7240     | 7377 | 7515 | 7653 | 7791 | 7928 | 8066 | 8204 | 8341 | 8479 | 138     |
| 54   | 8617     | 8755 | 8892 | 9030 | 9168 | 9305 | 9443 | 9581 | 9718 | 9856 | 1 13.8  |
| 55   | 9994     | 0131 | 0269 | 0407 | 0544 | 0682 | 0819 | 0957 | 1095 | 1232 | 2 27.6  |
| 56   | 499 1370 | 1508 | 1645 | 1783 | 1920 | 2058 | 2196 | 2333 | 2471 | 2608 | 3 41.4  |
| 57   | 2746     | 2883 | 3021 | 3158 | 3296 | 3434 | 3571 | 3709 | 3846 | 3984 | 4 55.2  |
| 58   | 4121     | 4259 | 4396 | 4534 | 4671 | 4809 | 4946 | 5084 | 5221 | 5359 | 5 69.0  |
| 59   | 5496     | 5634 | 5771 | 5909 | 6046 | 6184 | 6321 | 6459 | 6596 | 6733 | 6 82.8  |
| 3160 | 499 6871 | 7008 | 7146 | 7283 | 7421 | 7558 | 7695 | 7833 | 7970 | 8108 | 7 96.6  |
| 61   | 8245     | 8382 | 8520 | 8657 | 8794 | 8932 | 9069 | 9207 | 9344 | 9481 | 8 110.4 |
| 62   | 9619     | 9756 | 9893 | 0031 | 0168 | 0305 | 0443 | 0580 | 0717 | 0855 | 9 124.2 |
| 63   | 500 0992 | 1129 | 1267 | 1404 | 1541 | 1678 | 1816 | 1953 | 2090 | 2227 |         |
| 64   | 2365     | 2502 | 2639 | 2777 | 2914 | 3051 | 3188 | 3325 | 3463 | 3600 |         |
| 65   | 3737     | 3874 | 4012 | 4149 | 4286 | 4423 | 4560 | 4698 | 4835 | 4972 | 137     |
| 66   | 5109     | 5246 | 5383 | 5521 | 5658 | 5795 | 5932 | 6069 | 6206 | 6344 | 1 13.7  |
| 67   | 6481     | 6618 | 6755 | 6892 | 7029 | 7166 | 7303 | 7440 | 7578 | 7715 | 2 27.4  |
| 68   | 7852     | 7989 | 8126 | 8263 | 8400 | 8537 | 8674 | 8811 | 8948 | 9085 | 3 41.1  |
| 69   | 9222     | 9359 | 9496 | 9634 | 9771 | 9908 | 0045 | 0182 | 0319 | 0456 | 4 54.8  |
| 3170 | 501 0593 | 0730 | 0867 | 1004 | 1141 | 1278 | 1415 | 1552 | 1688 | 1825 | 5 68.5  |
| 71   | 1962     | 2099 | 2236 | 2373 | 2510 | 2647 | 2784 | 2921 | 3058 | 3195 | 6 82.2  |
| 72   | 3332     | 3469 | 3606 | 3743 | 3880 | 4016 | 4153 | 4290 | 4427 | 4564 | 7 95.9  |
| 73   | 4701     | 4838 | 4974 | 5111 | 5248 | 5385 | 5522 | 5659 | 5796 | 5932 | 8 109.6 |
| 74   | 6069     | 6206 | 6343 | 6480 | 6617 | 6753 | 6890 | 7027 | 7164 | 7301 | 9 123.3 |
| 75   | 7437     | 7574 | 7711 | 7848 | 7984 | 8121 | 8258 | 8395 | 8531 | 8668 |         |
| 76   | 8805     | 8942 | 9078 | 9215 | 9352 | 9489 | 9625 | 9762 | 9899 | 0035 |         |
| 77   | 502 0172 | 0309 | 0446 | 0582 | 0719 | 0856 | 0992 | 1129 | 1266 | 1402 | 136     |
| 78   | 1539     | 1676 | 1812 | 1949 | 2086 | 2222 | 2359 | 2495 | 2632 | 2769 | 1 13.6  |
| 79   | 2905     | 3042 | 3178 | 3315 | 3452 | 3588 | 3725 | 3861 | 3998 | 4135 | 2 27.2  |
| 3180 | 502 4271 | 4408 | 4544 | 4681 | 4817 | 4954 | 5091 | 5227 | 5364 | 5500 | 3 40.8  |
| 81   | 5637     | 5773 | 5910 | 6046 | 6183 | 6319 | 6456 | 6592 | 6729 | 6865 | 4 54.4  |
| 82   | 7002     | 7138 | 7275 | 7411 | 7548 | 7684 | 7821 | 7957 | 8093 | 8230 | 5 68.0  |
| 83   | 8366     | 8503 | 8639 | 8776 | 8912 | 9049 | 9185 | 9321 | 9458 | 9594 | 6 81.6  |
| 84   | 9731     | 9867 | 0003 | 0140 | 0276 | 0413 | 0549 | 0685 | 0822 | 0958 | 7 95.2  |
| 85   | 503 1094 | 1231 | 1367 | 1503 | 1640 | 1776 | 1912 | 2049 | 2185 | 2321 | 8 108.8 |
| 86   | 2458     | 2594 | 2730 | 2867 | 3003 | 3139 | 3276 | 3412 | 3548 | 3684 | 9 122.4 |
| 87   | 3821     | 3957 | 4093 | 4229 | 4366 | 4502 | 4638 | 4774 | 4911 | 5047 |         |
| 88   | 5183     | 5319 | 5455 | 5592 | 5728 | 5864 | 6000 | 6137 | 6273 | 6409 |         |
| 89   | 6545     | 6681 | 6818 | 6954 | 7090 | 7226 | 7362 | 7498 | 7635 | 7771 |         |
| 3190 | 503 7907 | 8043 | 8179 | 8315 | 8451 | 8587 | 8724 | 8860 | 8996 | 9132 | 135     |
| 91   | 9268     | 9404 | 9540 | 9676 | 9812 | 9948 | 0085 | 0221 | 0357 | 0493 | 1 13.5  |
| 92   | 504 0629 | 0765 | 0901 | 1037 | 1173 | 1309 | 1445 | 1581 | 1717 | 1853 | 2 27.0  |
| 93   | 1989     | 2125 | 2261 | 2397 | 2533 | 2669 | 2805 | 2941 | 3077 | 3213 | 3 40.5  |
| 94   | 3349     | 3485 | 3621 | 3757 | 3893 | 4029 | 4165 | 4301 | 4437 | 4573 | 4 54.0  |
| 95   | 4709     | 4845 | 4980 | 5116 | 5252 | 5388 | 5524 | 5660 | 5796 | 5932 | 5 67.5  |
| 96   | 6068     | 6204 | 6339 | 6475 | 6611 | 6747 | 6883 | 7019 | 7155 | 7291 | 6 81.0  |
| 97   | 7426     | 7562 | 7698 | 7834 | 7970 | 8106 | 8241 | 8377 | 8513 | 8649 | 7 94.5  |
| 98   | 8785     | 8920 | 9056 | 9192 | 9328 | 9464 | 9599 | 9735 | 9871 | 0007 | 8 108.0 |
| 99   | 505 0142 | 0278 | 0414 | 0550 | 0685 | 0821 | 0957 | 1093 | 1228 | 1364 | 9 121.5 |
| 3200 | 505 1500 | 1635 | 1771 | 1907 | 2043 | 2178 | 2314 | 2450 | 2585 | 2721 |         |

| N. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | P. P. |
|----|---|---|---|---|---|---|---|---|---|---|-------|
|----|---|---|---|---|---|---|---|---|---|---|-------|

31500" = 8° 45' 0"  
 31600" = 8 46 40  
 31700" = 8 48 20  
 31800" = 8 50 0  
 31500" = 0° 52' 30"  
 31600" = 0 52 40  
 31700" = 0 52 50  
 31800" = 0 53 0

S. 4.685 5580 T. 6086  
 5579 6088  
 5578 6091  
 5577 6093







| N.   | 0        | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | P. P.   |
|------|----------|------|------|------|------|------|------|------|------|------|---------|
| 3250 | 511 8834 | 8967 | 9101 | 9234 | 9368 | 9502 | 9635 | 9769 | 9903 | 8036 |         |
| 51   | 512 0170 | 0303 | 0437 | 0570 | 0704 | 0838 | 0971 | 1105 | 1238 | 1372 |         |
| 52   | 1505     | 1639 | 1772 | 1906 | 2040 | 2173 | 2307 | 2440 | 2574 | 2707 |         |
| 53   | 2841     | 2974 | 3108 | 3241 | 3375 | 3508 | 3642 | 3775 | 3909 | 4042 |         |
| 54   | 4175     | 4309 | 4442 | 4576 | 4709 | 4843 | 4976 | 5110 | 5243 | 5377 | 1 134   |
| 55   | 5510     | 5643 | 5777 | 5910 | 6044 | 6177 | 6310 | 6444 | 6577 | 6711 | 2 26.8  |
| 56   | 6844     | 6977 | 7111 | 7244 | 7377 | 7511 | 7644 | 7778 | 7911 | 8044 | 3 40.2  |
| 57   | 8178     | 8311 | 8444 | 8578 | 8711 | 8844 | 8978 | 9111 | 9244 | 9377 | 4 53.6  |
| 58   | 9511     | 9644 | 9777 | 9911 | 0044 | 0177 | 0311 | 0444 | 0577 | 0710 | 5 67.0  |
| 59   | 512 0834 | 0977 | 1110 | 1243 | 1377 | 1510 | 1643 | 1776 | 1910 | 2043 | 6 80.4  |
| 3260 | 513 2176 | 2309 | 2442 | 2576 | 2709 | 2842 | 2975 | 3108 | 3242 | 3375 | 7 94.8  |
| 61   | 3508     | 3641 | 3774 | 3908 | 4041 | 4174 | 4307 | 4440 | 4574 | 4707 | 8 107.2 |
| 62   | 4841     | 4974 | 5108 | 5241 | 5374 | 5508 | 5641 | 5774 | 5908 | 6041 | 9 120.6 |
| 63   | 6171     | 6304 | 6437 | 6570 | 6703 | 6836 | 6969 | 7102 | 7235 | 7368 |         |
| 64   | 7504     | 7638 | 7771 | 7904 | 8038 | 8171 | 8304 | 8437 | 8570 | 8703 |         |
| 65   | 8842     | 8975 | 9108 | 9241 | 9374 | 9507 | 9640 | 9773 | 9906 | 0039 |         |
| 66   | 513 0164 | 0298 | 0431 | 0564 | 0697 | 0830 | 0963 | 1096 | 1229 | 1362 | 1 133   |
| 67   | 1494     | 1627 | 1760 | 1893 | 2026 | 2159 | 2292 | 2425 | 2558 | 2691 | 2 26.6  |
| 68   | 2830     | 2963 | 3096 | 3229 | 3362 | 3495 | 3628 | 3761 | 3894 | 4027 | 3 39.9  |
| 69   | 4169     | 4302 | 4435 | 4568 | 4701 | 4834 | 4967 | 5100 | 5233 | 5366 | 4 53.2  |
| 3270 | 514 5128 | 5261 | 5394 | 5527 | 5660 | 5793 | 5926 | 6059 | 6192 | 6325 | 5 66.5  |
| 71   | 6505     | 6638 | 6771 | 6904 | 7037 | 7170 | 7303 | 7436 | 7569 | 7702 | 6 79.8  |
| 72   | 8041     | 8174 | 8307 | 8440 | 8573 | 8706 | 8839 | 8972 | 9105 | 9238 | 7 93.1  |
| 73   | 9577     | 9710 | 9843 | 9976 | 0109 | 0242 | 0375 | 0508 | 0641 | 0774 | 8 106.4 |
| 74   | 515 0287 | 0420 | 0553 | 0686 | 0819 | 0952 | 1085 | 1218 | 1351 | 1484 | 9 119.7 |
| 75   | 1611     | 1744 | 1877 | 2010 | 2143 | 2276 | 2409 | 2542 | 2675 | 2808 |         |
| 76   | 2949     | 3082 | 3215 | 3348 | 3481 | 3614 | 3747 | 3880 | 4013 | 4146 |         |
| 77   | 4481     | 4614 | 4747 | 4880 | 5013 | 5146 | 5279 | 5412 | 5545 | 5678 |         |
| 78   | 6019     | 6152 | 6285 | 6418 | 6551 | 6684 | 6817 | 6950 | 7083 | 7216 | 1 132   |
| 79   | 7354     | 7487 | 7620 | 7753 | 7886 | 8019 | 8152 | 8285 | 8418 | 8551 | 2 26.4  |
| 3280 | 515 8248 | 8381 | 8514 | 8647 | 8780 | 8913 | 9046 | 9179 | 9312 | 9445 | 3 39.6  |
| 81   | 516 0362 | 0495 | 0628 | 0761 | 0894 | 1027 | 1160 | 1293 | 1426 | 1559 | 4 52.8  |
| 82   | 1686     | 1819 | 1952 | 2085 | 2218 | 2351 | 2484 | 2617 | 2750 | 2883 | 5 66.0  |
| 83   | 2909     | 3042 | 3175 | 3308 | 3441 | 3574 | 3707 | 3840 | 3973 | 4106 | 6 79.2  |
| 84   | 4241     | 4374 | 4507 | 4640 | 4773 | 4906 | 5039 | 5172 | 5305 | 5438 | 7 92.4  |
| 85   | 5353     | 5486 | 5619 | 5752 | 5885 | 6018 | 6151 | 6284 | 6417 | 6550 | 8 105.6 |
| 86   | 6662     | 6795 | 6928 | 7061 | 7194 | 7327 | 7460 | 7593 | 7726 | 7859 | 9 118.8 |
| 87   | 7997     | 8130 | 8263 | 8396 | 8529 | 8662 | 8795 | 8928 | 9061 | 9194 |         |
| 88   | 9319     | 9452 | 9585 | 9718 | 9851 | 9984 | 0117 | 0250 | 0383 | 0516 |         |
| 89   | 517 0419 | 0552 | 0685 | 0818 | 0951 | 1084 | 1217 | 1350 | 1483 | 1616 |         |
| 3290 | 517 9519 | 9652 | 9785 | 9918 | 0051 | 0184 | 0317 | 0450 | 0583 | 0716 | 1 131   |
| 91   | 1029     | 1162 | 1295 | 1428 | 1561 | 1694 | 1827 | 1960 | 2093 | 2226 | 2 26.2  |
| 92   | 2369     | 2502 | 2635 | 2768 | 2901 | 3034 | 3167 | 3300 | 3433 | 3566 | 3 39.4  |
| 93   | 3807     | 3940 | 4073 | 4206 | 4339 | 4472 | 4605 | 4738 | 4871 | 4904 | 4 52.6  |
| 94   | 5346     | 5479 | 5612 | 5745 | 5878 | 6011 | 6144 | 6277 | 6410 | 6543 | 5 65.8  |
| 95   | 6681     | 6814 | 6947 | 7080 | 7213 | 7346 | 7479 | 7612 | 7745 | 7878 | 6 78.6  |
| 96   | 8014     | 8147 | 8280 | 8413 | 8546 | 8679 | 8812 | 8945 | 9078 | 9211 | 7 91.7  |
| 97   | 518 1129 | 1262 | 1395 | 1528 | 1661 | 1794 | 1927 | 2060 | 2193 | 2326 | 8 104.8 |
| 98   | 2467     | 2600 | 2733 | 2866 | 2999 | 3132 | 3265 | 3398 | 3531 | 3664 | 9 117.9 |
| 99   | 3801     | 3934 | 4067 | 4200 | 4333 | 4466 | 4599 | 4732 | 4865 | 4998 |         |
| 3300 | 518 5119 | 5252 | 5385 | 5518 | 5651 | 5784 | 5917 | 6050 | 6183 | 6316 |         |

| N. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | P. P. |
|----|---|---|---|---|---|---|---|---|---|---|-------|
|----|---|---|---|---|---|---|---|---|---|---|-------|

32500 = 9° 1' 40"

32500 = 6° 54' 16" R. 4.685 3589 T. 6108



| N.    | 0         | 1    | 2    | 3     | 4     | 5     | 6         | 7     | 8     | 9     | P. M. |
|-------|-----------|------|------|-------|-------|-------|-----------|-------|-------|-------|-------|
| 3300  | 518 5139  | 5271 | 5404 | 5537  | 5670  | 5803  | 5936      | 6069  | 6202  | 6335  |       |
| 01    | 6455      | 6587 | 6718 | 6849  | 6980  | 7111  | 7242      | 7373  | 7504  | 7635  |       |
| 02    | 7774      | 7905 | 8036 | 8167  | 8298  | 8429  | 8560      | 8691  | 8822  | 8953  |       |
| 03    | 9086      | 9217 | 9348 | 9479  | 9610  | 9741  | 9872      | 10003 | 10134 | 10265 |       |
| 04    | 519 0300  | 0432 | 0563 | 0694  | 0825  | 0956  | 1087      | 1218  | 1349  | 1480  |       |
| 05    | 1715      | 1846 | 1977 | 2108  | 2239  | 2370  | 2501      | 2632  | 2763  | 2894  |       |
| 06    | 3028      | 3159 | 3290 | 3421  | 3552  | 3683  | 3814      | 3945  | 4076  | 4207  |       |
| 07    | 4344      | 4475 | 4606 | 4737  | 4868  | 4999  | 5130      | 5261  | 5392  | 5523  |       |
| 08    | 5658      | 5789 | 5920 | 6051  | 6182  | 6313  | 6444      | 6575  | 6706  | 6837  |       |
| 09    | 6968      | 7099 | 7230 | 7361  | 7492  | 7623  | 7754      | 7885  | 8016  | 8147  |       |
| 3310  | 519 8280  | 8411 | 8542 | 8673  | 8804  | 8935  | 9066      | 9197  | 9328  | 9459  |       |
| 11    | 9592      | 9723 | 9854 | 9985  | 10116 | 10247 | 10378     | 10509 | 10640 | 10771 |       |
| 12    | 520 0903  | 1034 | 1165 | 1296  | 1427  | 1558  | 1689      | 1820  | 1951  | 2082  |       |
| 13    | 2214      | 2345 | 2476 | 2607  | 2738  | 2869  | 2999      | 3130  | 3261  | 3392  |       |
| 14    | 3535      | 3666 | 3797 | 3928  | 4059  | 4190  | 4321      | 4452  | 4583  | 4714  |       |
| 15    | 4845      | 4976 | 5107 | 5238  | 5369  | 5499  | 5630      | 5761  | 5892  | 6023  |       |
| 16    | 6145      | 6276 | 6407 | 6538  | 6669  | 6799  | 6930      | 7061  | 7192  | 7323  |       |
| 17    | 7458      | 7589 | 7720 | 7851  | 7982  | 8113  | 8244      | 8375  | 8506  | 8637  |       |
| 18    | 8768      | 8899 | 9030 | 9161  | 9292  | 9423  | 9554      | 9685  | 9816  | 9947  |       |
| 19    | 521 0071  | 0204 | 0335 | 0466  | 0597  | 0728  | 0859      | 0990  | 1121  | 1252  |       |
| 3320  | 521 1181  | 1312 | 1443 | 1574  | 1705  | 1836  | 1967      | 2098  | 2229  | 2360  |       |
| 21    | 2689      | 2820 | 2951 | 3082  | 3213  | 3344  | 3475      | 3606  | 3737  | 3868  |       |
| 22    | 3999      | 4130 | 4261 | 4392  | 4523  | 4654  | 4785      | 4916  | 5047  | 5178  |       |
| 23    | 5303      | 5434 | 5565 | 5696  | 5827  | 5958  | 6089      | 6220  | 6351  | 6482  |       |
| 24    | 6610      | 6741 | 6872 | 7003  | 7134  | 7265  | 7396      | 7527  | 7658  | 7789  |       |
| 25    | 7916      | 8047 | 8178 | 8309  | 8440  | 8571  | 8702      | 8833  | 8964  | 9095  |       |
| 26    | 9222      | 9353 | 9484 | 9615  | 9746  | 9877  | 10008     | 10139 | 10270 | 10401 |       |
| 27    | 522 0528  | 0659 | 0790 | 0921  | 1052  | 1183  | 1314      | 1445  | 1576  | 1707  |       |
| 28    | 1833      | 1964 | 2095 | 2226  | 2357  | 2488  | 2619      | 2750  | 2881  | 3012  |       |
| 29    | 3148      | 3279 | 3410 | 3541  | 3672  | 3803  | 3934      | 4065  | 4196  | 4327  |       |
| 3330  | 522 4412  | 4543 | 4674 | 4805  | 4936  | 5067  | 5198      | 5329  | 5460  | 5591  |       |
| 31    | 5740      | 5871 | 6002 | 6133  | 6264  | 6395  | 6526      | 6657  | 6788  | 6919  |       |
| 32    | 7053      | 7184 | 7315 | 7446  | 7577  | 7708  | 7839      | 7970  | 8101  | 8232  |       |
| 33    | 8353      | 8484 | 8615 | 8746  | 8877  | 9008  | 9139      | 9270  | 9401  | 9532  |       |
| 34    | 9663      | 9794 | 9925 | 10056 | 10187 | 10318 | 10449     | 10580 | 10711 | 10842 |       |
| 35    | 523 0958  | 1089 | 1220 | 1351  | 1482  | 1613  | 1744      | 1875  | 2006  | 2137  |       |
| 36    | 2260      | 2391 | 2522 | 2653  | 2784  | 2915  | 3046      | 3177  | 3308  | 3439  |       |
| 37    | 3562      | 3693 | 3824 | 3955  | 4086  | 4217  | 4348      | 4479  | 4610  | 4741  |       |
| 38    | 4863      | 4994 | 5125 | 5256  | 5387  | 5518  | 5649      | 5780  | 5911  | 6042  |       |
| 39    | 6164      | 6295 | 6426 | 6557  | 6688  | 6819  | 6950      | 7081  | 7212  | 7343  |       |
| 3340  | 523 7403  | 7534 | 7665 | 7796  | 7927  | 8058  | 8189      | 8320  | 8451  | 8582  |       |
| 41    | 8765      | 8896 | 9027 | 9158  | 9289  | 9420  | 9551      | 9682  | 9813  | 9944  |       |
| 42    | 524 0064  | 0195 | 0326 | 0457  | 0588  | 0719  | 0850      | 0981  | 1112  | 1243  |       |
| 43    | 1364      | 1495 | 1626 | 1757  | 1888  | 2019  | 2150      | 2281  | 2412  | 2543  |       |
| 44    | 2663      | 2794 | 2925 | 3056  | 3187  | 3318  | 3449      | 3580  | 3711  | 3842  |       |
| 45    | 3961      | 4092 | 4223 | 4354  | 4485  | 4616  | 4747      | 4878  | 5009  | 5140  |       |
| 46    | 5259      | 5390 | 5521 | 5652  | 5783  | 5914  | 6045      | 6176  | 6307  | 6438  |       |
| 47    | 6557      | 6688 | 6819 | 6950  | 7081  | 7212  | 7343      | 7474  | 7605  | 7736  |       |
| 48    | 7854      | 7985 | 8116 | 8247  | 8378  | 8509  | 8640      | 8771  | 8902  | 9033  |       |
| 49    | 9151      | 9282 | 9413 | 9544  | 9675  | 9806  | 9937      | 10068 | 10199 | 10330 |       |
| 3350  | 525 0448  | 0579 | 0710 | 0841  | 0972  | 1103  | 1234      | 1365  | 1496  | 1627  |       |
| N.    | 0         | 1    | 2    | 3     | 4     | 5     | 6         | 7     | 8     | 9     | P. M. |
| 33000 | 0 9 10 0  |      |      |       |       | 33000 | 0 9 10 0  |       |       |       |       |
| 33100 | 0 9 11 40 |      |      |       |       | 33100 | 0 9 11 40 |       |       |       |       |
| 33200 | 0 9 13 20 |      |      |       |       | 33200 | 0 9 13 20 |       |       |       |       |
| 33300 | 0 9 15 0  |      |      |       |       | 33300 | 0 9 15 0  |       |       |       |       |
| 33400 | 0 9 16 40 |      |      |       |       | 33400 | 0 9 16 40 |       |       |       |       |



| N.   | 0          | 1    | 2    | 3    | 4    | 5          | 6        | 7    | 8       | 9    | P. P. |
|------|------------|------|------|------|------|------------|----------|------|---------|------|-------|
| 3350 | 525 0448   | 0578 | 0707 | 0837 | 0967 | 1096       | 1226     | 1355 | 1485    | 1615 |       |
| 51   | 1744       | 1874 | 2003 | 2133 | 2263 | 2392       | 2522     | 2651 | 2781    | 2911 |       |
| 52   | 3040       | 3170 | 3299 | 3429 | 3558 | 3688       | 3817     | 3947 | 4076    | 4206 |       |
| 53   | 4336       | 4465 | 4595 | 4724 | 4854 | 4983       | 5113     | 5242 | 5372    | 5501 | 130   |
| 54   | 5631       | 5760 | 5890 | 6019 | 6148 | 6278       | 6407     | 6537 | 6666    | 6796 | 130   |
| 55   | 6925       | 7055 | 7184 | 7314 | 7443 | 7572       | 7702     | 7831 | 7961    | 8090 | 26.0  |
| 56   | 8220       | 8349 | 8478 | 8608 | 8737 | 8867       | 8996     | 9125 | 9255    | 9384 | 39.0  |
| 57   | 9513       | 9643 | 9772 | 9902 | 0031 | 0160       | 0290     | 0419 | 0548    | 0678 | 52.0  |
| 58   | 526 0807   | 0936 | 1066 | 1195 | 1324 | 1454       | 1583     | 1712 | 1841    | 1971 | 65.0  |
| 59   | 2100       | 2229 | 2359 | 2488 | 2617 | 2746       | 2876     | 3005 | 3134    | 3264 | 78.0  |
| 3360 | 526 3393   | 3522 | 3651 | 3781 | 3910 | 4039       | 4168     | 4297 | 4427    | 4556 | 91.0  |
| 61   | 4685       | 4814 | 4944 | 5073 | 5202 | 5331       | 5460     | 5590 | 5719    | 5848 | 104.0 |
| 62   | 5977       | 6106 | 6235 | 6365 | 6494 | 6623       | 6752     | 6881 | 7010    | 7140 | 117.0 |
| 63   | 7269       | 7398 | 7527 | 7656 | 7785 | 7914       | 8043     | 8173 | 8302    | 8431 |       |
| 64   | 8560       | 8689 | 8818 | 8947 | 9076 | 9205       | 9334     | 9463 | 9593    | 9722 |       |
| 65   | 9851       | 9980 | 0109 | 0238 | 0367 | 0496       | 0625     | 0754 | 0883    | 1012 | 129   |
| 66   | 527 1141   | 1270 | 1399 | 1528 | 1657 | 1786       | 1915     | 2044 | 2173    | 2302 | 12.9  |
| 67   | 2431       | 2560 | 2689 | 2818 | 2947 | 3076       | 3205     | 3334 | 3463    | 3592 | 25.8  |
| 68   | 3721       | 3850 | 3979 | 4108 | 4237 | 4366       | 4494     | 4623 | 4752    | 4881 | 38.7  |
| 69   | 5010       | 5139 | 5268 | 5397 | 5526 | 5655       | 5783     | 5912 | 6041    | 6170 | 51.6  |
| 3370 | 527 6299   | 6428 | 6557 | 6686 | 6814 | 6943       | 7072     | 7201 | 7330    | 7459 | 64.5  |
| 71   | 7588       | 7716 | 7845 | 7974 | 8103 | 8232       | 8360     | 8489 | 8618    | 8747 | 77.4  |
| 72   | 8876       | 9004 | 9133 | 9262 | 9391 | 9520       | 9648     | 9777 | 9906    | 0035 | 90.3  |
| 73   | 528 0163   | 0292 | 0421 | 0550 | 0678 | 0807       | 0936     | 1065 | 1193    | 1322 | 103.2 |
| 74   | 1451       | 1579 | 1708 | 1837 | 1966 | 2094       | 2223     | 2352 | 2480    | 2609 | 116.1 |
| 75   | 2738       | 2866 | 2995 | 3124 | 3252 | 3381       | 3510     | 3638 | 3767    | 3896 |       |
| 76   | 4024       | 4153 | 4282 | 4410 | 4539 | 4668       | 4796     | 4925 | 5053    | 5182 |       |
| 77   | 5311       | 5439 | 5568 | 5696 | 5825 | 5954       | 6082     | 6211 | 6339    | 6468 | 128   |
| 78   | 6596       | 6725 | 6854 | 6982 | 7111 | 7239       | 7368     | 7496 | 7625    | 7753 | 12.8  |
| 79   | 7882       | 8010 | 8139 | 8267 | 8396 | 8525       | 8653     | 8782 | 8910    | 9039 | 25.6  |
| 3380 | 528 9167   | 9295 | 9424 | 9552 | 9681 | 9809       | 9938     | 0066 | 0195    | 0323 | 38.4  |
| 81   | 529 0452   | 0580 | 0709 | 0837 | 0965 | 1094       | 1222     | 1351 | 1479    | 1608 | 51.2  |
| 82   | 1736       | 1864 | 1993 | 2121 | 2250 | 2378       | 2506     | 2635 | 2763    | 2892 | 64.0  |
| 83   | 3020       | 3148 | 3277 | 3405 | 3533 | 3662       | 3790     | 3919 | 4047    | 4175 | 76.8  |
| 84   | 4304       | 4432 | 4560 | 4689 | 4817 | 4945       | 5074     | 5202 | 5330    | 5458 | 89.6  |
| 85   | 5587       | 5715 | 5843 | 5972 | 6100 | 6228       | 6356     | 6485 | 6613    | 6741 | 102.4 |
| 86   | 6870       | 6998 | 7126 | 7254 | 7383 | 7511       | 7639     | 7767 | 7896    | 8024 | 115.2 |
| 87   | 8152       | 8280 | 8408 | 8537 | 8665 | 8793       | 8921     | 9049 | 9178    | 9306 |       |
| 88   | 9434       | 9562 | 9690 | 9819 | 9947 | 0075       | 0203     | 0331 | 0459    | 0588 |       |
| 89   | 530 0716   | 0844 | 0972 | 1100 | 1228 | 1356       | 1485     | 1613 | 1741    | 1869 | 127   |
| 3390 | 530 1997   | 2125 | 2253 | 2381 | 2509 | 2637       | 2766     | 2894 | 3022    | 3150 | 12.7  |
| 91   | 3278       | 3406 | 3534 | 3662 | 3790 | 3918       | 4046     | 4174 | 4302    | 4430 | 25.4  |
| 92   | 4558       | 4686 | 4814 | 4943 | 5071 | 5199       | 5327     | 5455 | 5583    | 5711 | 38.1  |
| 93   | 5839       | 5967 | 6095 | 6223 | 6351 | 6479       | 6607     | 6734 | 6862    | 6990 | 50.8  |
| 94   | 7118       | 7246 | 7374 | 7502 | 7630 | 7758       | 7886     | 8014 | 8142    | 8270 | 63.5  |
| 95   | 8398       | 8526 | 8654 | 8782 | 8909 | 9037       | 9165     | 9293 | 9421    | 9549 | 76.2  |
| 96   | 9677       | 9805 | 9933 | 0060 | 0188 | 0316       | 0444     | 0572 | 0700    | 0828 | 88.9  |
| 97   | 531 0955   | 1083 | 1211 | 1339 | 1467 | 1595       | 1722     | 1850 | 1978    | 2106 | 101.6 |
| 98   | 2234       | 2362 | 2489 | 2617 | 2745 | 2873       | 3001     | 3128 | 3256    | 3384 | 114.3 |
| 99   | 3512       | 3639 | 3767 | 3895 | 4023 | 4150       | 4278     | 4406 | 4534    | 4662 |       |
| 3400 | 531 4789   | 4917 | 5045 | 5172 | 5300 | 5428       | 5556     | 5683 | 5811    | 5939 |       |
| N.   | 0          | 1    | 2    | 3    | 4    | 5          | 6        | 7    | 8       | 9    | P. P. |
| 3350 | 9° 18' 20" |      |      |      |      | 0° 55' 50" | S. 4.685 | 5558 | T. 6131 |      |       |
| 3360 | 9 20 0     |      |      |      |      | 0 56 0     |          | 5557 | 6133    |      |       |
| 3370 | 9 21 40    |      |      |      |      | 0 56 10    |          | 5555 | 6135    |      |       |
| 3380 | 9 23 20    |      |      |      |      | 0 56 20    |          | 5554 | 6137    |      |       |
| 3390 | 9 25 0     |      |      |      |      | 0 56 30    |          | 5553 | 6140    |      |       |



| N.    | 0          | 1    | 2    | 3    | 4     | 5          | 6        | 7     | 8     | 9     | P. P. |
|-------|------------|------|------|------|-------|------------|----------|-------|-------|-------|-------|
| 3400  | 531 4789   | 4917 | 5045 | 5172 | 5300  | 5428       | 5556     | 5683  | 5811  | 5939  |       |
| 01    | 6066       | 6194 | 6322 | 6449 | 6577  | 6705       | 6833     | 6960  | 7088  | 7216  |       |
| 02    | 7343       | 7471 | 7598 | 7726 | 7854  | 7981       | 8109     | 8237  | 8365  | 8493  |       |
| 03    | 8619       | 8747 | 8875 | 9002 | 9130  | 9258       | 9386     | 9513  | 9641  | 9769  |       |
| 04    | 9896       | 0023 | 0151 | 0278 | 0406  | 0533       | 0661     | 0788  | 0916  | 1044  |       |
| 05    | 532 1171   | 1299 | 1426 | 1554 | 1681  | 1809       | 1936     | 2064  | 2192  | 2319  |       |
| 06    | 2446       | 2574 | 2701 | 2829 | 2956  | 3084       | 3211     | 3339  | 3467  | 3594  |       |
| 07    | 3721       | 3849 | 3976 | 4103 | 4231  | 4359       | 4486     | 4614  | 4742  | 4869  |       |
| 08    | 4996       | 5123 | 5251 | 5378 | 5506  | 5633       | 5761     | 5888  | 6016  | 6144  |       |
| 09    | 6270       | 6397 | 6525 | 6652 | 6780  | 6907       | 7035     | 7163  | 7290  | 7418  |       |
| 8410  | 532 7544   | 7671 | 7799 | 7926 | 8053  | 8181       | 8308     | 8436  | 8564  | 8691  |       |
| 11    | 8817       | 8945 | 9072 | 9199 | 9326  | 9454       | 9581     | 9709  | 9836  | 9964  |       |
| 12    | 533 0090   | 0218 | 0345 | 0472 | 0599  | 0727       | 0854     | 0982  | 1109  | 1237  |       |
| 13    | 1363       | 1490 | 1617 | 1745 | 1872  | 1999       | 2127     | 2254  | 2382  | 2509  |       |
| 14    | 2635       | 2762 | 2890 | 3017 | 3144  | 3272       | 3399     | 3527  | 3654  | 3781  |       |
| 15    | 3907       | 4034 | 4162 | 4289 | 4416  | 4544       | 4671     | 4799  | 4926  | 5054  |       |
| 16    | 5179       | 5306 | 5433 | 5561 | 5688  | 5815       | 5943     | 6070  | 6198  | 6325  |       |
| 17    | 6450       | 6577 | 6704 | 6831 | 6959  | 7086       | 7214     | 7341  | 7469  | 7596  |       |
| 18    | 7721       | 7848 | 7975 | 8102 | 8230  | 8357       | 8484     | 8612  | 8739  | 8866  |       |
| 19    | 8991       | 9118 | 9245 | 9372 | 9499  | 9627       | 9754     | 9881  | 10009 | 10136 |       |
| 3420  | 534 0261   | 0388 | 0515 | 0642 | 0769  | 0896       | 1024     | 1151  | 1278  | 1406  |       |
| 21    | 1531       | 1658 | 1785 | 1912 | 2039  | 2167       | 2294     | 2421  | 2549  | 2676  |       |
| 22    | 2800       | 2927 | 3054 | 3181 | 3308  | 3436       | 3563     | 3690  | 3818  | 3945  |       |
| 23    | 4069       | 4196 | 4323 | 4450 | 4577  | 4705       | 4832     | 4959  | 5087  | 5214  |       |
| 24    | 5338       | 5464 | 5591 | 5718 | 5845  | 5972       | 6100     | 6227  | 6354  | 6481  |       |
| 25    | 6606       | 6733 | 6859 | 6986 | 7113  | 7240       | 7368     | 7495  | 7622  | 7749  |       |
| 26    | 7874       | 8000 | 8127 | 8254 | 8381  | 8509       | 8636     | 8763  | 8890  | 9017  |       |
| 27    | 9141       | 9268 | 9394 | 9521 | 9648  | 9775       | 9902     | 10029 | 10156 | 10283 |       |
| 28    | 535 0408   | 0535 | 0662 | 0789 | 0916  | 1043       | 1170     | 1297  | 1424  | 1551  |       |
| 29    | 1675       | 1802 | 1928 | 2055 | 2182  | 2309       | 2436     | 2563  | 2690  | 2817  |       |
| 3430  | 535 2941   | 3068 | 3194 | 3321 | 3448  | 3575       | 3702     | 3829  | 3956  | 4083  |       |
| 31    | 4207       | 4334 | 4460 | 4587 | 4713  | 4840       | 4967     | 5094  | 5221  | 5348  |       |
| 32    | 5473       | 5599 | 5726 | 5852 | 5979  | 6106       | 6233     | 6360  | 6487  | 6614  |       |
| 33    | 6738       | 6865 | 6991 | 7118 | 7244  | 7371       | 7498     | 7625  | 7752  | 7879  |       |
| 34    | 8003       | 8130 | 8256 | 8383 | 8509  | 8636       | 8763     | 8890  | 9017  | 9144  |       |
| 35    | 9267       | 9394 | 9520 | 9647 | 9773  | 9900       | 10027    | 10154 | 10281 | 10408 |       |
| 36    | 536 0532   | 0658 | 0784 | 0911 | 1037  | 1164       | 1291     | 1418  | 1545  | 1672  |       |
| 37    | 1795       | 1922 | 2048 | 2174 | 2301  | 2428       | 2554     | 2681  | 2808  | 2935  |       |
| 38    | 3059       | 3185 | 3311 | 3438 | 3564  | 3691       | 3818     | 3945  | 4072  | 4199  |       |
| 39    | 4322       | 4448 | 4574 | 4701 | 4827  | 4954       | 5081     | 5208  | 5335  | 5462  |       |
| 8440  | 536 5584   | 5711 | 5837 | 5963 | 6089  | 6216       | 6342     | 6469  | 6595  | 6722  |       |
| 41    | 6847       | 6973 | 7099 | 7225 | 7352  | 7478       | 7605     | 7731  | 7858  | 7984  |       |
| 42    | 8109       | 8235 | 8361 | 8487 | 8614  | 8740       | 8867     | 8993  | 9120  | 9246  |       |
| 43    | 9370       | 9496 | 9622 | 9749 | 9875  | 10001      | 10128    | 10254 | 10381 | 10508 |       |
| 44    | 537 0631   | 0758 | 0884 | 1010 | 1136  | 1262       | 1389     | 1515  | 1642  | 1768  |       |
| 45    | 1892       | 2018 | 2144 | 2270 | 2396  | 2522       | 2649     | 2775  | 2901  | 3028  |       |
| 46    | 3153       | 3279 | 3405 | 3531 | 3657  | 3783       | 3910     | 4036  | 4162  | 4289  |       |
| 47    | 4413       | 4539 | 4665 | 4791 | 4917  | 5043       | 5169     | 5295  | 5422  | 5548  |       |
| 48    | 5673       | 5799 | 5924 | 6050 | 6176  | 6302       | 6428     | 6554  | 6681  | 6807  |       |
| 49    | 6932       | 7058 | 7184 | 7310 | 7436  | 7562       | 7688     | 7814  | 7940  | 8067  |       |
| 8450  | 537 8191   | 8317 | 8443 | 8569 | 8694  | 8820       | 8946     | 9072  | 9198  | 9324  |       |
| N.    | 0          | 1    | 2    | 3    | 4     | 5          | 6        | 7     | 8     | 9     | P. P. |
| 3400' | 0° 26' 40" |      |      |      | 3400' | 0° 26' 40" | N. 4.635 | 5553  | T     | 0.143 |       |
| 34100 | 0° 28' 20" |      |      |      | 34100 | 0° 28' 20" |          | 5551  |       | 0.044 |       |
| 34200 | 0° 30' 0"  |      |      |      | 34200 | 0° 30' 0"  |          | 5550  |       | 0.147 |       |
| 34300 | 0° 31' 40" |      |      |      | 34300 | 0° 31' 40" |          | 5549  |       | 0.249 |       |
| 34400 | 0° 33' 20" |      |      |      | 34400 | 0° 33' 20" |          | 5547  |       | 0.353 |       |



| N.   | 0       | 1       | 2       | 3       | 4       | 5       | 6       | 7       | 8       | 9       | P. P. |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-------|
| 3450 | 547 800 | 547 810 | 547 820 | 547 830 | 547 840 | 547 850 | 547 860 | 547 870 | 547 880 | 547 890 |       |
| 51   | 9450    | 9451    | 9452    | 9453    | 9454    | 9455    | 9456    | 9457    | 9458    | 9459    |       |
| 52   | 548 000 | 548 010 | 548 020 | 548 030 | 548 040 | 548 050 | 548 060 | 548 070 | 548 080 | 548 090 |       |
| 53   | 1956    | 1957    | 1958    | 1959    | 1960    | 1961    | 1962    | 1963    | 1964    | 1965    |       |
| 54   | 1434    | 1435    | 1436    | 1437    | 1438    | 1439    | 1440    | 1441    | 1442    | 1443    |       |
| 55   | 4184    | 4185    | 4186    | 4187    | 4188    | 4189    | 4190    | 4191    | 4192    | 4193    |       |
| 56   | 547 900 | 547 910 | 547 920 | 547 930 | 547 940 | 547 950 | 547 960 | 547 970 | 547 980 | 547 990 |       |
| 57   | 549 000 | 549 010 | 549 020 | 549 030 | 549 040 | 549 050 | 549 060 | 549 070 | 549 080 | 549 090 |       |
| 58   | 549 100 | 549 110 | 549 120 | 549 130 | 549 140 | 549 150 | 549 160 | 549 170 | 549 180 | 549 190 |       |
| 59   | 549 200 | 549 210 | 549 220 | 549 230 | 549 240 | 549 250 | 549 260 | 549 270 | 549 280 | 549 290 |       |
| 3460 | 549 300 | 549 310 | 549 320 | 549 330 | 549 340 | 549 350 | 549 360 | 549 370 | 549 380 | 549 390 |       |
| 60   | 1446    | 1447    | 1448    | 1449    | 1450    | 1451    | 1452    | 1453    | 1454    | 1455    |       |
| 61   | 1456    | 1457    | 1458    | 1459    | 1460    | 1461    | 1462    | 1463    | 1464    | 1465    |       |
| 62   | 1466    | 1467    | 1468    | 1469    | 1470    | 1471    | 1472    | 1473    | 1474    | 1475    |       |
| 63   | 549 400 | 549 410 | 549 420 | 549 430 | 549 440 | 549 450 | 549 460 | 549 470 | 549 480 | 549 490 |       |
| 64   | 549 500 | 549 510 | 549 520 | 549 530 | 549 540 | 549 550 | 549 560 | 549 570 | 549 580 | 549 590 |       |
| 65   | 549 600 | 549 610 | 549 620 | 549 630 | 549 640 | 549 650 | 549 660 | 549 670 | 549 680 | 549 690 |       |
| 66   | 549 700 | 549 710 | 549 720 | 549 730 | 549 740 | 549 750 | 549 760 | 549 770 | 549 780 | 549 790 |       |
| 67   | 549 800 | 549 810 | 549 820 | 549 830 | 549 840 | 549 850 | 549 860 | 549 870 | 549 880 | 549 890 |       |
| 68   | 549 900 | 549 910 | 549 920 | 549 930 | 549 940 | 549 950 | 549 960 | 549 970 | 549 980 | 549 990 |       |
| 69   | 550 000 | 550 010 | 550 020 | 550 030 | 550 040 | 550 050 | 550 060 | 550 070 | 550 080 | 550 090 |       |
| 3470 | 550 100 | 550 110 | 550 120 | 550 130 | 550 140 | 550 150 | 550 160 | 550 170 | 550 180 | 550 190 |       |
| 70   | 1476    | 1477    | 1478    | 1479    | 1480    | 1481    | 1482    | 1483    | 1484    | 1485    |       |
| 71   | 1486    | 1487    | 1488    | 1489    | 1490    | 1491    | 1492    | 1493    | 1494    | 1495    |       |
| 72   | 1496    | 1497    | 1498    | 1499    | 1500    | 1501    | 1502    | 1503    | 1504    | 1505    |       |
| 73   | 550 200 | 550 210 | 550 220 | 550 230 | 550 240 | 550 250 | 550 260 | 550 270 | 550 280 | 550 290 |       |
| 74   | 550 300 | 550 310 | 550 320 | 550 330 | 550 340 | 550 350 | 550 360 | 550 370 | 550 380 | 550 390 |       |
| 75   | 550 400 | 550 410 | 550 420 | 550 430 | 550 440 | 550 450 | 550 460 | 550 470 | 550 480 | 550 490 |       |
| 76   | 550 500 | 550 510 | 550 520 | 550 530 | 550 540 | 550 550 | 550 560 | 550 570 | 550 580 | 550 590 |       |
| 77   | 550 600 | 550 610 | 550 620 | 550 630 | 550 640 | 550 650 | 550 660 | 550 670 | 550 680 | 550 690 |       |
| 78   | 550 700 | 550 710 | 550 720 | 550 730 | 550 740 | 550 750 | 550 760 | 550 770 | 550 780 | 550 790 |       |
| 79   | 550 800 | 550 810 | 550 820 | 550 830 | 550 840 | 550 850 | 550 860 | 550 870 | 550 880 | 550 890 |       |
| 3480 | 550 900 | 550 910 | 550 920 | 550 930 | 550 940 | 550 950 | 550 960 | 550 970 | 550 980 | 550 990 |       |
| 80   | 1506    | 1507    | 1508    | 1509    | 1510    | 1511    | 1512    | 1513    | 1514    | 1515    |       |
| 81   | 1516    | 1517    | 1518    | 1519    | 1520    | 1521    | 1522    | 1523    | 1524    | 1525    |       |
| 82   | 1526    | 1527    | 1528    | 1529    | 1530    | 1531    | 1532    | 1533    | 1534    | 1535    |       |
| 83   | 551 000 | 551 010 | 551 020 | 551 030 | 551 040 | 551 050 | 551 060 | 551 070 | 551 080 | 551 090 |       |
| 84   | 551 100 | 551 110 | 551 120 | 551 130 | 551 140 | 551 150 | 551 160 | 551 170 | 551 180 | 551 190 |       |
| 85   | 551 200 | 551 210 | 551 220 | 551 230 | 551 240 | 551 250 | 551 260 | 551 270 | 551 280 | 551 290 |       |
| 86   | 551 300 | 551 310 | 551 320 | 551 330 | 551 340 | 551 350 | 551 360 | 551 370 | 551 380 | 551 390 |       |
| 87   | 551 400 | 551 410 | 551 420 | 551 430 | 551 440 | 551 450 | 551 460 | 551 470 | 551 480 | 551 490 |       |
| 88   | 551 500 | 551 510 | 551 520 | 551 530 | 551 540 | 551 550 | 551 560 | 551 570 | 551 580 | 551 590 |       |
| 89   | 551 600 | 551 610 | 551 620 | 551 630 | 551 640 | 551 650 | 551 660 | 551 670 | 551 680 | 551 690 |       |
| 3490 | 551 700 | 551 710 | 551 720 | 551 730 | 551 740 | 551 750 | 551 760 | 551 770 | 551 780 | 551 790 |       |
| 90   | 1536    | 1537    | 1538    | 1539    | 1540    | 1541    | 1542    | 1543    | 1544    | 1545    |       |
| 91   | 1546    | 1547    | 1548    | 1549    | 1550    | 1551    | 1552    | 1553    | 1554    | 1555    |       |
| 92   | 1556    | 1557    | 1558    | 1559    | 1560    | 1561    | 1562    | 1563    | 1564    | 1565    |       |
| 93   | 552 000 | 552 010 | 552 020 | 552 030 | 552 040 | 552 050 | 552 060 | 552 070 | 552 080 | 552 090 |       |
| 94   | 552 100 | 552 110 | 552 120 | 552 130 | 552 140 | 552 150 | 552 160 | 552 170 | 552 180 | 552 190 |       |
| 95   | 552 200 | 552 210 | 552 220 | 552 230 | 552 240 | 552 250 | 552 260 | 552 270 | 552 280 | 552 290 |       |
| 96   | 552 300 | 552 310 | 552 320 | 552 330 | 552 340 | 552 350 | 552 360 | 552 370 | 552 380 | 552 390 |       |
| 97   | 552 400 | 552 410 | 552 420 | 552 430 | 552 440 | 552 450 | 552 460 | 552 470 | 552 480 | 552 490 |       |
| 98   | 552 500 | 552 510 | 552 520 | 552 530 | 552 540 | 552 550 | 552 560 | 552 570 | 552 580 | 552 590 |       |
| 99   | 552 600 | 552 610 | 552 620 | 552 630 | 552 640 | 552 650 | 552 660 | 552 670 | 552 680 | 552 690 |       |
| 3500 | 552 700 | 552 710 | 552 720 | 552 730 | 552 740 | 552 750 | 552 760 | 552 770 | 552 780 | 552 790 |       |
| 100  | 1566    | 1567    | 1568    | 1569    | 1570    | 1571    | 1572    | 1573    | 1574    | 1575    |       |
| 101  | 1576    | 1577    | 1578    | 1579    | 1580    | 1581    | 1582    | 1583    | 1584    | 1585    |       |
| 102  | 1586    | 1587    | 1588    | 1589    | 1590    | 1591    | 1592    | 1593    | 1594    | 1595    |       |
| 103  | 553 000 | 553 010 | 553 020 | 553 030 | 553 040 | 553 050 | 553 060 | 553 070 | 553 080 | 553 090 |       |
| 104  | 553 100 | 553 110 | 553 120 | 553 130 | 553 140 | 553 150 | 553 160 | 553 170 | 553 180 | 553 190 |       |
| 105  | 553 200 | 553 210 | 553 220 | 553 230 | 553 240 | 553 250 | 553 260 | 553 270 | 553 280 | 553 290 |       |
| 106  | 553 300 | 553 310 | 553 320 | 553 330 | 553 340 | 553 350 | 553 360 | 553 370 | 553 380 | 553 390 |       |
| 107  | 553 400 | 553 410 | 553 420 | 553 430 | 553 440 | 553 450 | 553 460 | 553 470 | 553 480 | 553 490 |       |
| 108  | 553 500 | 553 510 | 553 520 | 553 530 | 553 540 | 553 550 | 553 560 | 553 570 | 553 580 | 553 590 |       |
| 109  | 553 600 | 553 610 | 553 620 | 553 630 | 553 640 | 553 650 | 553 660 | 553 670 | 553 680 | 553 690 |       |
| 3510 | 553 700 | 553 710 | 553 720 | 553 730 | 553 740 | 553 750 | 553 760 | 553 770 | 553 780 | 553 790 |       |
| 110  | 1596    | 1597    | 1598    | 1599    | 1600    | 1601    | 1602    | 1603    | 1604    | 1605    |       |
| 111  | 1606    | 1607    | 1608    | 1609    | 1610    | 1611    | 1612    | 1613    | 1614    | 1615    |       |
| 112  | 1616    | 1617    | 1618    | 1619    | 1620    | 1621    | 1622    | 1623    | 1624    | 1625    |       |
| 113  | 554 000 | 554 010 | 554 020 | 554 030 | 554 040 | 554 050 | 554 060 | 554 070 | 554 080 | 554 090 |       |
| 114  | 554 100 | 554 110 | 554 120 | 554 130 | 554 140 | 554 150 | 554 160 | 554 170 | 554 180 | 554 190 |       |
| 115  | 554 200 | 554 210 | 554 220 | 554 230 | 554 240 | 554 250 | 554 260 | 554 270 | 554 280 | 554 290 |       |
| 116  | 554 300 | 554 310 | 554 320 | 554 330 | 554 340 | 554 350 | 554 360 | 554 370 | 554 380 | 554 390 |       |
| 117  | 554 400 | 554 410 | 554 420 | 554 430 | 554 440 | 554 450 | 554 460 | 554 470 | 554 480 | 554 490 |       |
| 118  | 554 500 | 554 510 | 554 520 | 554 530 | 554 540 | 554 550 | 554 560 | 554 570 | 554 580 | 554 590 |       |
| 119  | 554 600 | 554 610 | 554 620 | 554 630 | 554 640 | 554 650 | 554 660 | 554 670 | 554 680 | 554 690 |       |
| 3520 | 554 700 | 554 710 | 554 720 | 554 730 | 554 740 | 554 750 | 554 760 | 554 770 | 554 780 | 554 790 |       |
| 120  | 1626    | 1627    | 1628    | 1629    | 1630    | 1631    | 1632    | 1633    | 1634    | 1635    |       |
| 121  | 1636    | 1637    | 1638    | 1639    | 1640    | 1641    | 1642    | 1643    | 1644    | 1645    |       |
| 122  | 1646    | 1647    | 1648    | 1649    | 1650    | 1651    | 1652    | 1653    | 1654    | 1655    |       |
| 123  | 555 000 | 555 010 | 555 020 | 555 030 | 555 040 | 555 050 | 555 060 | 555 070 | 555 080 | 555 090 |       |
| 124  | 555 100 | 555 110 | 555 120 | 555 130 | 555 140 | 555 150 | 555 160 | 555 170 | 555 180 | 555 190 |       |
| 125  | 555 200 | 555 210 | 555 220 | 555 230 | 555 240 | 555 250 | 555 260 | 555 270 | 555 280 | 555 290 |       |
| 126  | 555 300 | 555 310 | 555 320 | 555 330 | 555 340 | 555 350 | 555 360 | 555 370 | 555 380 | 555 390 |       |
| 127  | 555 400 | 555 410 | 555 420 | 555 430 | 555 440 | 555 450 | 555 460 | 555 470 | 555 480 | 555 490 |       |
| 128  | 555 500 | 555 510 | 555 520 | 555 530 | 555 540 | 555 550 | 555 560 | 555 570 | 555 580 | 555 590 |       |
| 129  | 555 600 | 555 610 | 555 620 | 555 630 | 555 640 | 555 650 | 555 660 | 555 670 | 555 680 | 555 690 |       |
| 3530 | 555 700 | 555 710 | 555 720 | 555 730 | 555 740 | 555 750 | 555 760 | 555 770 | 555 780 | 555 790 |       |
| 130  | 1656    | 1657    | 1658    | 1659    | 1660    | 1661    | 1662    | 1663    | 1664    | 1665    |       |
| 131  | 1666    | 1667    | 1668    | 1669    | 1670    | 1671    | 1672    | 1673    | 1674    | 1675    |       |
| 132  | 1676    | 1677    | 1678    | 1679    | 1680    | 1681    | 1682    | 1683    | 1684    | 1685    |       |
| 133  | 556 000 | 556 010 | 556 020 | 556 030 | 556 040 | 556 050 | 556 060 | 556 070 | 556 080 | 556 090 |       |
| 134  | 556 100 | 556 110 | 556 120 | 556 130 | 556 140 | 556 150 | 556 160 | 556 170 | 556 180 | 556 190 |       |
| 135  | 556 200 | 556 210 | 556 220 | 556 230 | 556 240 | 556 250 | 556 260 | 556 270 | 556 280 | 556 290 |       |
| 136  | 556 300 | 556 310 | 556 320 | 556 330 | 556 340 | 556 350 | 556 360 | 556 370 | 556 380 | 556 390 |       |
| 137  | 5       |         |         |         |         |         |         |         |         |         |       |



| N.    | 0            | 1    | 2     | 3     | 4     | 5     | 6       | 7     | 8       | 9     | P. P. |
|-------|--------------|------|-------|-------|-------|-------|---------|-------|---------|-------|-------|
| 3500  | 544 0680     | 0805 | 0929  | 1053  | 1177  | 1301  | 1425    | 1549  | 1673    | 1797  |       |
| 01    | 1921         | 2045 | 2169  | 2293  | 2417  | 2541  | 2665    | 2789  | 2913    | 3037  |       |
| 02    | 3161         | 3285 | 3409  | 3533  | 3657  | 3781  | 3905    | 4029  | 4153    | 4277  |       |
| 03    | 4401         | 4525 | 4649  | 4773  | 4897  | 5021  | 5145    | 5269  | 5393    | 5517  |       |
| 04    | 5641         | 5765 | 5889  | 6013  | 6137  | 6261  | 6385    | 6508  | 6632    | 6756  | 125   |
| 05    | 6880         | 7004 | 7128  | 7252  | 7376  | 7500  | 7624    | 7747  | 7871    | 7995  | 12.5  |
| 06    | 8119         | 8243 | 8367  | 8491  | 8615  | 8738  | 8862    | 8986  | 9110    | 9234  | 25.0  |
| 07    | 9358         | 9481 | 9605  | 9729  | 9853  | 9977  | 10101   | 10224 | 10348   | 10472 | 37.5  |
| 08    | 545 0596     | 0720 | 0843  | 0967  | 1091  | 1215  | 1339    | 1462  | 1586    | 1710  | 50.0  |
| 09    | 1834         | 1957 | 2081  | 2205  | 2329  | 2452  | 2576    | 2700  | 2824    | 2947  | 62.5  |
| 3510  | 545 3071     | 3195 | 3319  | 3442  | 3566  | 3690  | 3813    | 3937  | 4061    | 4185  | 75.0  |
| 11    | 4308         | 4432 | 4556  | 4679  | 4803  | 4927  | 5050    | 5174  | 5298    | 5421  | 87.5  |
| 12    | 5545         | 5669 | 5792  | 5916  | 6040  | 6163  | 6287    | 6411  | 6534    | 6658  | 100.0 |
| 13    | 6781         | 6905 | 7029  | 7152  | 7276  | 7400  | 7523    | 7647  | 7770    | 7894  | 112.5 |
| 14    | 8018         | 8141 | 8265  | 8388  | 8512  | 8635  | 8759    | 8883  | 9006    | 9130  |       |
| 15    | 9253         | 9377 | 9500  | 9624  | 9747  | 9871  | 9995    | 10118 | 10242   | 10365 | 124   |
| 16    | 546 0489     | 0612 | 0736  | 0859  | 0983  | 1106  | 1230    | 1353  | 1477    | 1600  | 12.4  |
| 17    | 1724         | 1847 | 1971  | 2094  | 2218  | 2341  | 2465    | 2588  | 2711    | 2835  | 24.8  |
| 18    | 2958         | 3082 | 3205  | 3329  | 3452  | 3576  | 3699    | 3822  | 3946    | 4069  | 37.2  |
| 19    | 4193         | 4316 | 4439  | 4563  | 4686  | 4810  | 4933    | 5056  | 5180    | 5303  | 49.6  |
| 3520  | 546 5427     | 5550 | 5673  | 5797  | 5920  | 6043  | 6167    | 6290  | 6414    | 6537  | 62.0  |
| 21    | 6660         | 6784 | 6907  | 7030  | 7154  | 7277  | 7400    | 7524  | 7647    | 7770  | 74.4  |
| 22    | 7894         | 8017 | 8140  | 8263  | 8387  | 8510  | 8633    | 8757  | 8880    | 9003  | 86.8  |
| 23    | 9126         | 9250 | 9373  | 9496  | 9620  | 9743  | 9866    | 9989  | 10113   | 10236 | 99.2  |
| 24    | 547 0359     | 0482 | 0605  | 0729  | 0852  | 0975  | 1098    | 1222  | 1345    | 1468  | 111.6 |
| 25    | 1591         | 1714 | 1838  | 1961  | 2084  | 2207  | 2330    | 2454  | 2577    | 2700  |       |
| 26    | 2823         | 2946 | 3069  | 3193  | 3316  | 3439  | 3562    | 3685  | 3808    | 3931  |       |
| 27    | 4055         | 4178 | 4301  | 4424  | 4547  | 4670  | 4793    | 4916  | 5040    | 5163  | 123   |
| 28    | 5286         | 5409 | 5532  | 5655  | 5778  | 5901  | 6024    | 6147  | 6270    | 6394  | 12.3  |
| 29    | 6517         | 6640 | 6763  | 6886  | 7009  | 7132  | 7255    | 7378  | 7501    | 7624  | 24.6  |
| 3530  | 547 7747     | 7870 | 7993  | 8116  | 8239  | 8362  | 8485    | 8608  | 8731    | 8854  | 36.9  |
| 31    | 8977         | 9100 | 9223  | 9346  | 9469  | 9592  | 9715    | 9838  | 9961    | 10084 | 49.2  |
| 32    | 548 0207     | 0330 | 0453  | 0576  | 0699  | 0822  | 0945    | 1068  | 1191    | 1313  | 61.5  |
| 33    | 1436         | 1559 | 1682  | 1805  | 1928  | 2051  | 2174    | 2297  | 2420    | 2543  | 73.8  |
| 34    | 2665         | 2788 | 2911  | 3034  | 3157  | 3280  | 3403    | 3526  | 3648    | 3771  | 86.1  |
| 35    | 3894         | 4017 | 4140  | 4263  | 4386  | 4508  | 4631    | 4754  | 4877    | 5000  | 98.4  |
| 36    | 5123         | 5245 | 5368  | 5491  | 5614  | 5737  | 5859    | 5982  | 6105    | 6228  | 110.7 |
| 37    | 6351         | 6473 | 6596  | 6719  | 6842  | 6964  | 7087    | 7210  | 7333    | 7456  |       |
| 38    | 7578         | 7701 | 7824  | 7947  | 8069  | 8192  | 8315    | 8437  | 8560    | 8683  |       |
| 39    | 8806         | 8928 | 9051  | 9174  | 9296  | 9419  | 9542    | 9665  | 9787    | 9910  |       |
| 3540  | 549 0031     | 0155 | 0278  | 0401  | 0523  | 0646  | 0769    | 0891  | 1014    | 1137  | 122   |
| 41    | 1259         | 1382 | 1505  | 1627  | 1750  | 1872  | 1995    | 2118  | 2240    | 2363  | 12.2  |
| 42    | 2486         | 2608 | 2731  | 2853  | 2976  | 3099  | 3221    | 3344  | 3466    | 3589  | 24.4  |
| 43    | 3712         | 3834 | 3957  | 4079  | 4202  | 4324  | 4447    | 4569  | 4692    | 4815  | 36.6  |
| 44    | 4937         | 5060 | 5182  | 5305  | 5427  | 5550  | 5672    | 5795  | 5917    | 6040  | 48.8  |
| 45    | 6162         | 6285 | 6407  | 6530  | 6652  | 6775  | 6897    | 7020  | 7142    | 7265  | 61.0  |
| 46    | 7387         | 7510 | 7632  | 7755  | 7877  | 8000  | 8122    | 8245  | 8367    | 8489  | 73.2  |
| 47    | 8612         | 8734 | 8857  | 8979  | 9102  | 9224  | 9346    | 9469  | 9591    | 9714  | 85.4  |
| 48    | 9836         | 9959 | 10081 | 10203 | 10326 | 10448 | 10570   | 10693 | 10815   | 10938 | 97.6  |
| 49    | 550 1060     | 1182 | 1305  | 1427  | 1549  | 1672  | 1794    | 1917  | 2039    | 2161  | 109.8 |
| 3550  | 550 2284     | 2406 | 2528  | 2651  | 2773  | 2895  | 3017    | 3140  | 3262    | 3384  |       |
| N.    | 0            | 1    | 2     | 3     | 4     | 5     | 6       | 7     | 8       | 9     | P. P. |
| 35000 | = 9° 43' 20" |      |       |       |       |       |         |       |         |       |       |
| 35100 | = 9 45 0     |      |       |       |       |       |         |       |         |       |       |
| 35200 | = 9 46 40    |      |       |       |       |       |         |       |         |       |       |
| 35300 | = 9 48 20    |      |       |       |       |       |         |       |         |       |       |
| 35400 | = 9 50 0     |      |       |       |       |       |         |       |         |       |       |
| 35000 | = 0° 58' 20" |      |       |       |       |       |         |       |         |       |       |
| 35100 | = 0 58 30    |      |       |       |       |       |         |       |         |       |       |
| 35200 | = 0 58 40    |      |       |       |       |       |         |       |         |       |       |
| 35300 | = 0 58 50    |      |       |       |       |       |         |       |         |       |       |
| 35400 | = 0 59 0     |      |       |       |       |       |         |       |         |       |       |
|       |              |      |       |       |       |       | 8.4.685 | 5540  | T. 6166 |       |       |
|       |              |      |       |       |       |       |         | 5539  | 6168    |       |       |
|       |              |      |       |       |       |       |         | 5538  | 6170    |       |       |
|       |              |      |       |       |       |       |         | 5537  | 6173    |       |       |
|       |              |      |       |       |       |       |         | 5535  | 6175    |       |       |



| N.   | 0        | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | P. P. |
|------|----------|------|------|------|------|------|------|------|------|------|-------|
| 3550 | 550 1251 | 2366 | 2538 | 2651 | 2774 | 2895 | 3017 | 3140 | 3262 | 3384 |       |
| 51   | 1252     | 2369 | 2541 | 2654 | 2777 | 2898 | 3020 | 3143 | 3265 | 3387 |       |
| 52   | 1253     | 2370 | 2542 | 2655 | 2778 | 2899 | 3021 | 3144 | 3266 | 3388 |       |
| 53   | 1254     | 2371 | 2543 | 2656 | 2779 | 2900 | 3022 | 3145 | 3267 | 3389 |       |
| 54   | 1255     | 2372 | 2544 | 2657 | 2780 | 2901 | 3023 | 3146 | 3268 | 3390 |       |
| 55   | 1256     | 2373 | 2545 | 2658 | 2781 | 2902 | 3024 | 3147 | 3269 | 3391 |       |
| 56   | 1257     | 2374 | 2546 | 2659 | 2782 | 2903 | 3025 | 3148 | 3270 | 3392 |       |
| 57   | 1258     | 2375 | 2547 | 2660 | 2783 | 2904 | 3026 | 3149 | 3271 | 3393 |       |
| 58   | 1259     | 2376 | 2548 | 2661 | 2784 | 2905 | 3027 | 3150 | 3272 | 3394 |       |
| 59   | 1260     | 2377 | 2549 | 2662 | 2785 | 2906 | 3028 | 3151 | 3273 | 3395 |       |
| 3560 | 550 1261 | 2378 | 2550 | 2663 | 2786 | 2907 | 3029 | 3152 | 3274 | 3396 |       |
| 61   | 1262     | 2379 | 2551 | 2664 | 2787 | 2908 | 3030 | 3153 | 3275 | 3397 |       |
| 62   | 1263     | 2380 | 2552 | 2665 | 2788 | 2909 | 3031 | 3154 | 3276 | 3398 |       |
| 63   | 1264     | 2381 | 2553 | 2666 | 2789 | 2910 | 3032 | 3155 | 3277 | 3399 |       |
| 64   | 1265     | 2382 | 2554 | 2667 | 2790 | 2911 | 3033 | 3156 | 3278 | 3400 |       |
| 65   | 1266     | 2383 | 2555 | 2668 | 2791 | 2912 | 3034 | 3157 | 3279 | 3401 |       |
| 66   | 1267     | 2384 | 2556 | 2669 | 2792 | 2913 | 3035 | 3158 | 3280 | 3402 |       |
| 67   | 1268     | 2385 | 2557 | 2670 | 2793 | 2914 | 3036 | 3159 | 3281 | 3403 |       |
| 68   | 1269     | 2386 | 2558 | 2671 | 2794 | 2915 | 3037 | 3160 | 3282 | 3404 |       |
| 69   | 1270     | 2387 | 2559 | 2672 | 2795 | 2916 | 3038 | 3161 | 3283 | 3405 |       |
| 3570 | 550 1271 | 2388 | 2560 | 2673 | 2796 | 2917 | 3039 | 3162 | 3284 | 3406 |       |
| 71   | 1272     | 2389 | 2561 | 2674 | 2797 | 2918 | 3040 | 3163 | 3285 | 3407 |       |
| 72   | 1273     | 2390 | 2562 | 2675 | 2798 | 2919 | 3041 | 3164 | 3286 | 3408 |       |
| 73   | 1274     | 2391 | 2563 | 2676 | 2799 | 2920 | 3042 | 3165 | 3287 | 3409 |       |
| 74   | 1275     | 2392 | 2564 | 2677 | 2800 | 2921 | 3043 | 3166 | 3288 | 3410 |       |
| 75   | 1276     | 2393 | 2565 | 2678 | 2801 | 2922 | 3044 | 3167 | 3289 | 3411 |       |
| 76   | 1277     | 2394 | 2566 | 2679 | 2802 | 2923 | 3045 | 3168 | 3290 | 3412 |       |
| 77   | 1278     | 2395 | 2567 | 2680 | 2803 | 2924 | 3046 | 3169 | 3291 | 3413 |       |
| 78   | 1279     | 2396 | 2568 | 2681 | 2804 | 2925 | 3047 | 3170 | 3292 | 3414 |       |
| 79   | 1280     | 2397 | 2569 | 2682 | 2805 | 2926 | 3048 | 3171 | 3293 | 3415 |       |
| 3580 | 550 1281 | 2398 | 2570 | 2683 | 2806 | 2927 | 3049 | 3172 | 3294 | 3416 |       |
| 81   | 1282     | 2399 | 2571 | 2684 | 2807 | 2928 | 3050 | 3173 | 3295 | 3417 |       |
| 82   | 1283     | 2400 | 2572 | 2685 | 2808 | 2929 | 3051 | 3174 | 3296 | 3418 |       |
| 83   | 1284     | 2401 | 2573 | 2686 | 2809 | 2930 | 3052 | 3175 | 3297 | 3419 |       |
| 84   | 1285     | 2402 | 2574 | 2687 | 2810 | 2931 | 3053 | 3176 | 3298 | 3420 |       |
| 85   | 1286     | 2403 | 2575 | 2688 | 2811 | 2932 | 3054 | 3177 | 3299 | 3421 |       |
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| 87   | 1288     | 2405 | 2577 | 2690 | 2813 | 2934 | 3056 | 3179 | 3301 | 3423 |       |
| 88   | 1289     | 2406 | 2578 | 2691 | 2814 | 2935 | 3057 | 3180 | 3302 | 3424 |       |
| 89   | 1290     | 2407 | 2579 | 2692 | 2815 | 2936 | 3058 | 3181 | 3303 | 3425 |       |
| 3590 | 550 1291 | 2408 | 2580 | 2693 | 2816 | 2937 | 3059 | 3182 | 3304 | 3426 |       |
| 91   | 1292     | 2409 | 2581 | 2694 | 2817 | 2938 | 3060 | 3183 | 3305 | 3427 |       |
| 92   | 1293     | 2410 | 2582 | 2695 | 2818 | 2939 | 3061 | 3184 | 3306 | 3428 |       |
| 93   | 1294     | 2411 | 2583 | 2696 | 2819 | 2940 | 3062 | 3185 | 3307 | 3429 |       |
| 94   | 1295     | 2412 | 2584 | 2697 | 2820 | 2941 | 3063 | 3186 | 3308 | 3430 |       |
| 95   | 1296     | 2413 | 2585 | 2698 | 2821 | 2942 | 3064 | 3187 | 3309 | 3431 |       |
| 96   | 1297     | 2414 | 2586 | 2699 | 2822 | 2943 | 3065 | 3188 | 3310 | 3432 |       |
| 97   | 1298     | 2415 | 2587 | 2700 | 2823 | 2944 | 3066 | 3189 | 3311 | 3433 |       |
| 98   | 1299     | 2416 | 2588 | 2701 | 2824 | 2945 | 3067 | 3190 | 3312 | 3434 |       |
| 99   | 1300     | 2417 | 2589 | 2702 | 2825 | 2946 | 3068 | 3191 | 3313 | 3435 |       |
| 3600 | 550 1301 | 2418 | 2590 | 2703 | 2826 | 2947 | 3069 | 3192 | 3314 | 3436 |       |
| 01   | 1302     | 2419 | 2591 | 2704 | 2827 | 2948 | 3070 | 3193 | 3315 | 3437 |       |
| 02   | 1303     | 2420 | 2592 | 2705 | 2828 | 2949 | 3071 | 3194 | 3316 | 3438 |       |
| 03   | 1304     | 2421 | 2593 | 2706 | 2829 | 2950 | 3072 | 3195 | 3317 | 3439 |       |
| 04   | 1305     | 2422 | 2594 | 2707 | 2830 | 2951 | 3073 | 3196 | 3318 | 3440 |       |
| 05   | 1306     | 2423 | 2595 | 2708 | 2831 | 2952 | 3074 | 3197 | 3319 | 3441 |       |
| 06   | 1307     | 2424 | 2596 | 2709 | 2832 | 2953 | 3075 | 3198 | 3320 | 3442 |       |
| 07   | 1308     | 2425 | 2597 | 2710 | 2833 | 2954 | 3076 | 3199 | 3321 | 3443 |       |
| 08   | 1309     | 2426 | 2598 | 2711 | 2834 | 2955 | 3077 | 3200 | 3322 | 3444 |       |
| 09   | 1310     | 2427 | 2599 | 2712 | 2835 | 2956 | 3078 | 3201 | 3323 | 3445 |       |
| 3610 | 550 1311 | 2428 | 2600 | 2713 | 2836 | 2957 | 3079 | 3202 | 3324 | 3446 |       |
| 11   | 1312     | 2429 | 2601 | 2714 | 2837 | 2958 | 3080 | 3203 | 3325 | 3447 |       |
| 12   | 1313     | 2430 | 2602 | 2715 | 2838 | 2959 | 3081 | 3204 | 3326 | 3448 |       |
| 13   | 1314     | 2431 | 2603 | 2716 | 2839 | 2960 | 3082 | 3205 | 3327 | 3449 |       |
| 14   | 1315     | 2432 | 2604 | 2717 | 2840 | 2961 | 3083 | 3206 | 3328 | 3450 |       |
| 15   | 1316     | 2433 | 2605 | 2718 | 2841 | 2962 | 3084 | 3207 | 3329 | 3451 |       |
| 16   | 1317     | 2434 | 2606 | 2719 | 2842 | 2963 | 3085 | 3208 | 3330 | 3452 |       |
| 17   | 1318     | 2435 | 2607 | 2720 | 2843 | 2964 | 3086 | 3209 | 3331 | 3453 |       |
| 18   | 1319     | 2436 | 2608 | 2721 | 2844 | 2965 | 3087 | 3210 | 3332 | 3454 |       |
| 19   | 1320     | 2437 | 2609 | 2722 | 2845 | 2966 | 3088 | 3211 | 3333 | 3455 |       |
| 3620 | 550 1321 | 2438 | 2610 | 2723 | 2846 | 2967 | 3089 | 3212 | 3334 | 3456 |       |
| 21   | 1322     | 2439 | 2611 | 2724 | 2847 | 2968 | 3090 | 3213 | 3335 | 3457 |       |
| 22   | 1323     | 2440 | 2612 | 2725 | 2848 | 2969 | 3091 | 3214 | 3336 | 3458 |       |
| 23   | 1324     | 2441 | 2613 | 2726 | 2849 | 2970 | 3092 | 3215 | 3337 | 3459 |       |
| 24   | 1325     | 2442 | 2614 | 2727 | 2850 | 2971 | 3093 | 3216 | 3338 | 3460 |       |
| 25   | 1326     | 2443 | 2615 | 2728 | 2851 | 2972 | 3094 | 3217 | 3339 | 3461 |       |
| 26   | 1327     | 2444 | 2616 | 2729 | 2852 | 2973 | 3095 | 3218 | 3340 | 3462 |       |
| 27   | 1328     | 2445 | 2617 | 2730 | 2853 | 2974 | 3096 | 3219 | 3341 | 3463 |       |
| 28   | 1329     | 2446 | 2618 | 2731 | 2854 | 2975 | 3097 | 3220 | 3342 | 3464 |       |
| 29   | 1330     | 2447 | 2619 | 2732 | 2855 | 2976 | 3098 | 3221 | 3343 | 3465 |       |
| 3630 | 550 1331 | 2448 | 2620 | 2733 | 2856 | 2977 | 3099 | 3222 | 3344 | 3466 |       |
| 31   | 1332     | 2449 | 2621 | 2734 | 2857 | 2978 | 3100 | 3223 | 3345 | 3467 |       |
| 32   | 1333     | 2450 | 2622 | 2735 | 2858 | 2979 | 3101 | 3224 | 3346 | 3468 |       |
| 33   | 1334     | 2451 | 2623 | 2736 | 2859 | 2980 | 3102 | 3225 | 3347 | 3469 |       |
| 34   | 1335     | 2452 | 2624 | 2737 | 2860 | 2981 | 3103 | 3226 | 3348 | 3470 |       |
| 35   | 1336     | 2453 | 2625 | 2738 | 2861 | 2982 | 3104 | 3227 | 3349 | 3471 |       |
| 36   | 1337     | 2454 | 2626 | 2739 | 2862 | 2983 | 3105 | 3228 | 3350 | 3472 |       |
| 37   | 1338     | 2455 | 2627 | 2740 | 2863 | 2984 | 3106 | 3229 | 3351 | 3473 |       |
| 38   | 1339     | 2456 | 2628 | 2741 | 2864 | 2985 | 3107 | 3230 | 3352 | 3474 |       |
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| 43   | 1344     | 2461 | 2633 | 2746 | 2869 | 2990 | 3112 | 3235 | 3357 | 3479 |       |
| 44   | 1345     | 2462 | 2634 | 2747 | 2870 | 2991 | 3113 | 3236 | 3358 | 3480 |       |
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| 46   | 1347     | 2464 | 2636 | 2749 | 2872 | 2993 | 3115 | 3238 | 3360 | 3482 |       |
| 47   | 1348     | 2465 | 2637 | 2750 | 2873 | 2994 | 3116 | 3239 | 3361 | 3483 |       |
| 48   | 1349     | 2466 | 2638 | 2751 | 2874 | 2995 | 3117 | 3240 | 3362 | 3484 |       |
| 49   | 1350     | 2467 | 2639 | 2752 | 2875 | 2996 | 3118 | 3241 | 3363 | 3485 |       |
| 3650 | 550 1351 | 2468 | 2640 | 2753 | 2876 | 2997 | 3119 | 3242 | 3364 | 3486 |       |
| 51   | 1352     | 2469 | 2641 | 2754 | 2877 | 2998 | 3120 | 3243 | 3365 | 3487 |       |
| 52   | 1353     | 2470 | 2642 | 2755 | 2878 | 2999 | 3121 | 3244 | 3366 | 3488 |       |
| 53   | 1354     | 2471 | 2643 | 2756 | 2879 | 3000 | 3122 | 3245 | 3367 | 3489 |       |
| 54   | 1355     | 2472 | 2644 | 2757 | 2880 | 3001 | 3123 | 3246 | 3368 | 3490 |       |
| 55   | 1356     | 2473 | 2645 | 2758 | 2881 | 3002 | 3124 | 3247 | 3369 | 3491 |       |
| 56   | 1357     | 2474 | 2646 | 2759 | 2882 | 3003 | 3125 | 3248 | 3370 | 3492 |       |
| 57   | 1358     | 2475 | 2647 | 2760 | 2883 | 3004 | 3126 | 3249 | 3371 | 3493 |       |
| 58   | 1359     | 2476 | 2648 | 2761 | 2884 | 3005 | 3127 | 3250 | 3372 | 3494 |       |
| 59   | 1360     | 2477 | 2649 | 2762 | 2885 | 3006 | 3128 | 3251 | 3373 | 3495 |       |
| 3660 | 550 1361 | 2478 | 2650 | 2763 | 2886 | 3007 | 3129 | 3252 | 3374 | 3496 |       |
| 61   | 1362     | 2479 | 2651 | 2764 | 2887 | 3008 | 3130 | 3253 | 3375 | 3497 |       |
| 62   | 1363     | 2480 | 2652 | 2765 | 2888 | 3009 | 3131 | 3254 | 3376 | 3498 |       |
| 63   | 1364     | 2481 | 2653 | 2766 | 2889 | 3010 | 3132 | 3255 |      |      |       |







| N.    | 0         | 1      | 2      | 3      | 4      | 5      | 6      | 7      | 8      | 9      | P. P. |
|-------|-----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|
| 3650  | 563 29 29 | 30 48  | 31 07  | 31 26  | 31 45  | 32 04  | 32 23  | 32 42  | 33 01  | 33 20  |       |
| 51    | 31 48     | 32 07  | 32 26  | 32 45  | 33 04  | 33 23  | 33 42  | 34 01  | 34 20  | 34 39  |       |
| 52    | 34 08     | 34 27  | 34 46  | 35 05  | 35 24  | 35 43  | 36 02  | 36 21  | 36 40  | 36 59  |       |
| 53    | 36 57     | 37 16  | 37 35  | 37 54  | 38 13  | 38 32  | 38 51  | 39 10  | 39 29  | 39 48  |       |
| 54    | 39 46     | 39 65  | 40 04  | 40 23  | 40 42  | 41 01  | 41 20  | 41 39  | 41 58  | 42 17  |       |
| 55    | 42 16     | 42 35  | 42 54  | 43 13  | 43 32  | 43 51  | 44 10  | 44 29  | 44 48  | 45 07  |       |
| 56    | 45 06     | 45 25  | 45 44  | 46 03  | 46 22  | 46 41  | 47 00  | 47 19  | 47 38  | 47 57  |       |
| 57    | 47 56     | 48 15  | 48 34  | 48 53  | 49 12  | 49 31  | 49 50  | 50 09  | 50 28  | 50 47  |       |
| 58    | 50 46     | 51 05  | 51 24  | 51 43  | 52 02  | 52 21  | 52 40  | 52 59  | 53 18  | 53 37  |       |
| 59    | 53 36     | 53 55  | 54 14  | 54 33  | 54 52  | 55 11  | 55 30  | 55 49  | 56 08  | 56 27  |       |
| 3660  | 56 26     | 56 45  | 57 04  | 57 23  | 57 42  | 58 01  | 58 20  | 58 39  | 58 58  | 59 17  |       |
| 60    | 59 16     | 59 35  | 59 54  | 60 13  | 60 32  | 60 51  | 61 10  | 61 29  | 61 48  | 62 07  |       |
| 61    | 62 06     | 62 25  | 62 44  | 63 03  | 63 22  | 63 41  | 64 00  | 64 19  | 64 38  | 64 57  |       |
| 62    | 64 56     | 65 15  | 65 34  | 65 53  | 66 12  | 66 31  | 66 50  | 67 09  | 67 28  | 67 47  |       |
| 63    | 67 46     | 68 05  | 68 24  | 68 43  | 69 02  | 69 21  | 69 40  | 69 59  | 70 18  | 70 37  |       |
| 64    | 70 36     | 70 55  | 71 14  | 71 33  | 71 52  | 72 11  | 72 30  | 72 49  | 73 08  | 73 27  |       |
| 65    | 73 26     | 73 45  | 74 04  | 74 23  | 74 42  | 75 01  | 75 20  | 75 39  | 75 58  | 76 17  |       |
| 66    | 76 16     | 76 35  | 76 54  | 77 13  | 77 32  | 77 51  | 78 10  | 78 29  | 78 48  | 79 07  |       |
| 67    | 79 06     | 79 25  | 79 44  | 79 63  | 80 02  | 80 21  | 80 40  | 80 59  | 81 18  | 81 37  |       |
| 68    | 81 36     | 81 55  | 82 14  | 82 33  | 82 52  | 83 11  | 83 30  | 83 49  | 84 08  | 84 27  |       |
| 69    | 84 26     | 84 45  | 84 64  | 85 03  | 85 22  | 85 41  | 86 00  | 86 19  | 86 38  | 86 57  |       |
| 3670  | 86 56     | 87 15  | 87 34  | 87 53  | 88 12  | 88 31  | 88 50  | 89 09  | 89 28  | 89 47  |       |
| 70    | 89 46     | 90 05  | 90 24  | 90 43  | 90 62  | 91 01  | 91 20  | 91 39  | 91 58  | 92 17  |       |
| 71    | 92 16     | 92 35  | 92 54  | 93 13  | 93 32  | 93 51  | 94 10  | 94 29  | 94 48  | 95 07  |       |
| 72    | 95 06     | 95 25  | 95 44  | 95 63  | 96 02  | 96 21  | 96 40  | 96 59  | 97 18  | 97 37  |       |
| 73    | 97 36     | 97 55  | 98 14  | 98 33  | 98 52  | 99 11  | 99 30  | 99 49  | 100 08 | 100 27 |       |
| 74    | 100 26    | 100 45 | 100 64 | 101 03 | 101 22 | 101 41 | 101 60 | 101 79 | 101 98 | 102 17 |       |
| 75    | 102 16    | 102 35 | 102 54 | 103 13 | 103 32 | 103 51 | 104 10 | 104 29 | 104 48 | 104 67 |       |
| 76    | 104 66    | 104 85 | 105 04 | 105 23 | 105 42 | 105 61 | 105 80 | 106 00 | 106 19 | 106 38 |       |
| 77    | 106 36    | 106 55 | 107 14 | 107 33 | 107 52 | 108 11 | 108 30 | 108 49 | 109 08 | 109 27 |       |
| 78    | 109 26    | 109 45 | 109 64 | 110 03 | 110 22 | 110 41 | 110 60 | 110 79 | 110 98 | 111 17 |       |
| 79    | 111 16    | 111 35 | 111 54 | 112 13 | 112 32 | 112 51 | 113 10 | 113 29 | 113 48 | 113 67 |       |
| 3680  | 113 66    | 113 85 | 114 04 | 114 23 | 114 42 | 114 61 | 114 80 | 115 00 | 115 19 | 115 38 |       |
| 80    | 115 36    | 115 55 | 116 14 | 116 33 | 116 52 | 117 11 | 117 30 | 117 49 | 118 08 | 118 27 |       |
| 81    | 118 26    | 118 45 | 118 64 | 118 83 | 119 02 | 119 21 | 119 40 | 119 59 | 120 18 | 120 37 |       |
| 82    | 120 36    | 120 55 | 121 14 | 121 33 | 121 52 | 122 11 | 122 30 | 122 49 | 123 08 | 123 27 |       |
| 83    | 123 26    | 123 45 | 123 64 | 123 83 | 124 02 | 124 21 | 124 40 | 124 59 | 125 18 | 125 37 |       |
| 84    | 125 36    | 125 55 | 126 14 | 126 33 | 126 52 | 127 11 | 127 30 | 127 49 | 128 08 | 128 27 |       |
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| 86    | 130 36    | 130 55 | 131 14 | 131 33 | 131 52 | 132 11 | 132 30 | 132 49 | 133 08 | 133 27 |       |
| 87    | 133 26    | 133 45 | 133 64 | 133 83 | 134 02 | 134 21 | 134 40 | 134 59 | 135 18 | 135 37 |       |
| 88    | 135 36    | 135 55 | 136 14 | 136 33 | 136 52 | 137 11 | 137 30 | 137 49 | 138 08 | 138 27 |       |
| 89    | 138 26    | 138 45 | 138 64 | 138 83 | 139 02 | 139 21 | 139 40 | 139 59 | 140 18 | 140 37 |       |
| 3690  | 140 36    | 140 55 | 141 14 | 141 33 | 141 52 | 142 11 | 142 30 | 142 49 | 143 08 | 143 27 |       |
| 90    | 143 26    | 143 45 | 143 64 | 143 83 | 144 02 | 144 21 | 144 40 | 144 59 | 145 18 | 145 37 |       |
| 91    | 145 36    | 145 55 | 146 14 | 146 33 | 146 52 | 147 11 | 147 30 | 147 49 | 148 08 | 148 27 |       |
| 92    | 148 26    | 148 45 | 148 64 | 148 83 | 149 02 | 149 21 | 149 40 | 149 59 | 150 18 | 150 37 |       |
| 93    | 150 36    | 150 55 | 151 14 | 151 33 | 151 52 | 152 11 | 152 30 | 152 49 | 153 08 | 153 27 |       |
| 94    | 153 26    | 153 45 | 153 64 | 153 83 | 154 02 | 154 21 | 154 40 | 154 59 | 155 18 | 155 37 |       |
| 95    | 155 36    | 155 55 | 156 14 | 156 33 | 156 52 | 157 11 | 157 30 | 157 49 | 158 08 | 158 27 |       |
| 96    | 158 26    | 158 45 | 158 64 | 158 83 | 159 02 | 159 21 | 159 40 | 159 59 | 160 18 | 160 37 |       |
| 97    | 160 36    | 160 55 | 161 14 | 161 33 | 161 52 | 162 11 | 162 30 | 162 49 | 163 08 | 163 27 |       |
| 98    | 163 26    | 163 45 | 163 64 | 163 83 | 164 02 | 164 21 | 164 40 | 164 59 | 165 18 | 165 37 |       |
| 99    | 165 36    | 165 55 | 166 14 | 166 33 | 166 52 | 167 11 | 167 30 | 167 49 | 168 08 | 168 27 |       |
| 3700  | 168 26    | 168 45 | 168 64 | 168 83 | 169 02 | 169 21 | 169 40 | 169 59 | 170 18 | 170 37 |       |
| N.    | 0         | 1      | 2      | 3      | 4      | 5      | 6      | 7      | 8      | 9      | P. P. |
| 36500 | 169 26    | 169 45 | 169 64 | 169 83 | 170 02 | 170 21 | 170 40 | 170 59 | 171 18 | 171 37 |       |
| 36600 | 171 36    | 171 55 | 172 14 | 172 33 | 172 52 | 173 11 | 173 30 | 173 49 | 174 08 | 174 27 |       |
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| 36800 | 176 36    | 176 55 | 177 14 | 177 33 | 177 52 | 178 11 | 178 30 | 178 49 | 179 08 | 179 27 |       |
| 36900 | 179 26    | 179 45 | 179 64 | 179 83 | 180 02 | 180 21 | 180 40 | 180 59 | 181 18 | 181 37 |       |















| N.   | 0        | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     | P. P. |
|------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 3850 | 535 4607 | 4720  | 4811  | 4949  | 5058  | 5171  | 5281  | 5397  | 5510  | 5621  |       |
| 51   | 5735     | 5818  | 5901  | 6004  | 6136  | 6299  | 6412  | 6535  | 6647  | 6750  |       |
| 52   | 6861     | 6976  | 7088  | 7201  | 7314  | 7436  | 7549  | 7653  | 7765  | 7877  |       |
| 53   | 7990     | 8104  | 8216  | 8328  | 8441  | 8553  | 8666  | 8779  | 8892  | 9004  |       |
| 54   | 9117     | 9230  | 9343  | 9455  | 9568  | 9681  | 9794  | 9906  | 10019 | 10131 |       |
| 55   | 10244    | 10356 | 10469 | 10581 | 10694 | 10807 | 10920 | 11033 | 11145 | 11258 |       |
| 56   | 11370    | 11481 | 11596 | 11708 | 11821 | 11934 | 12046 | 12159 | 12271 | 12384 |       |
| 57   | 12496    | 12609 | 12722 | 12834 | 12947 | 13059 | 13171 | 13284 | 13397 | 13509 | 113   |
| 58   | 13624    | 13735 | 13847 | 13959 | 14071 | 14184 | 14296 | 14409 | 14521 | 14634 | 114   |
| 59   | 14746    | 14858 | 14971 | 15083 | 15196 | 15308 | 15421 | 15534 | 15646 | 15759 | 115   |
| 3860 | 536 5071 | 5986  | 6098  | 6211  | 6324  | 6436  | 6549  | 6661  | 6774  | 6886  |       |
| 61   | 6998     | 7110  | 7223  | 7335  | 7448  | 7560  | 7673  | 7785  | 7898  | 8010  |       |
| 62   | 8123     | 8235  | 8348  | 8460  | 8573  | 8685  | 8798  | 8910  | 9023  | 9135  |       |
| 63   | 9247     | 9359  | 9472  | 9584  | 9697  | 9809  | 9922  | 10034 | 10147 | 10259 |       |
| 64   | 10372    | 10484 | 10597 | 10709 | 10822 | 10934 | 11047 | 11159 | 11272 | 11384 |       |
| 65   | 11497    | 11609 | 11722 | 11834 | 11947 | 12059 | 12172 | 12284 | 12397 | 12509 |       |
| 66   | 12622    | 12734 | 12847 | 12959 | 13072 | 13184 | 13297 | 13409 | 13522 | 13634 |       |
| 67   | 13747    | 13859 | 13972 | 14084 | 14197 | 14309 | 14422 | 14534 | 14647 | 14759 |       |
| 68   | 14872    | 14984 | 15097 | 15209 | 15322 | 15434 | 15547 | 15659 | 15772 | 15884 |       |
| 69   | 15997    | 16109 | 16222 | 16334 | 16447 | 16559 | 16672 | 16784 | 16897 | 17009 |       |
| 3870 | 537 1000 | 1011  | 1022  | 1033  | 1044  | 1055  | 1066  | 1077  | 1088  | 1099  |       |
| 71   | 1110     | 1121  | 1132  | 1143  | 1154  | 1165  | 1176  | 1187  | 1198  | 1209  |       |
| 72   | 1220     | 1231  | 1242  | 1253  | 1264  | 1275  | 1286  | 1297  | 1308  | 1319  |       |
| 73   | 1330     | 1341  | 1352  | 1363  | 1374  | 1385  | 1396  | 1407  | 1418  | 1429  |       |
| 74   | 1440     | 1451  | 1462  | 1473  | 1484  | 1495  | 1506  | 1517  | 1528  | 1539  |       |
| 75   | 1550     | 1561  | 1572  | 1583  | 1594  | 1605  | 1616  | 1627  | 1638  | 1649  |       |
| 76   | 1660     | 1671  | 1682  | 1693  | 1704  | 1715  | 1726  | 1737  | 1748  | 1759  |       |
| 77   | 1770     | 1781  | 1792  | 1803  | 1814  | 1825  | 1836  | 1847  | 1858  | 1869  |       |
| 78   | 1880     | 1891  | 1902  | 1913  | 1924  | 1935  | 1946  | 1957  | 1968  | 1979  |       |
| 79   | 1990     | 2001  | 2012  | 2023  | 2034  | 2045  | 2056  | 2067  | 2078  | 2089  |       |
| 3880 | 538 1000 | 1011  | 1022  | 1033  | 1044  | 1055  | 1066  | 1077  | 1088  | 1099  |       |
| 81   | 1110     | 1121  | 1132  | 1143  | 1154  | 1165  | 1176  | 1187  | 1198  | 1209  |       |
| 82   | 1220     | 1231  | 1242  | 1253  | 1264  | 1275  | 1286  | 1297  | 1308  | 1319  |       |
| 83   | 1330     | 1341  | 1352  | 1363  | 1374  | 1385  | 1396  | 1407  | 1418  | 1429  |       |
| 84   | 1440     | 1451  | 1462  | 1473  | 1484  | 1495  | 1506  | 1517  | 1528  | 1539  |       |
| 85   | 1550     | 1561  | 1572  | 1583  | 1594  | 1605  | 1616  | 1627  | 1638  | 1649  |       |
| 86   | 1660     | 1671  | 1682  | 1693  | 1704  | 1715  | 1726  | 1737  | 1748  | 1759  |       |
| 87   | 1770     | 1781  | 1792  | 1803  | 1814  | 1825  | 1836  | 1847  | 1858  | 1869  |       |
| 88   | 1880     | 1891  | 1902  | 1913  | 1924  | 1935  | 1946  | 1957  | 1968  | 1979  |       |
| 89   | 1990     | 2001  | 2012  | 2023  | 2034  | 2045  | 2056  | 2067  | 2078  | 2089  |       |
| 3890 | 539 1000 | 1011  | 1022  | 1033  | 1044  | 1055  | 1066  | 1077  | 1088  | 1099  |       |
| 91   | 1110     | 1121  | 1132  | 1143  | 1154  | 1165  | 1176  | 1187  | 1198  | 1209  |       |
| 92   | 1220     | 1231  | 1242  | 1253  | 1264  | 1275  | 1286  | 1297  | 1308  | 1319  |       |
| 93   | 1330     | 1341  | 1352  | 1363  | 1374  | 1385  | 1396  | 1407  | 1418  | 1429  |       |
| 94   | 1440     | 1451  | 1462  | 1473  | 1484  | 1495  | 1506  | 1517  | 1528  | 1539  |       |
| 95   | 1550     | 1561  | 1572  | 1583  | 1594  | 1605  | 1616  | 1627  | 1638  | 1649  |       |
| 96   | 1660     | 1671  | 1682  | 1693  | 1704  | 1715  | 1726  | 1737  | 1748  | 1759  |       |
| 97   | 1770     | 1781  | 1792  | 1803  | 1814  | 1825  | 1836  | 1847  | 1858  | 1869  |       |
| 98   | 1880     | 1891  | 1902  | 1913  | 1924  | 1935  | 1946  | 1957  | 1968  | 1979  |       |
| 99   | 1990     | 2001  | 2012  | 2023  | 2034  | 2045  | 2056  | 2067  | 2078  | 2089  |       |
| 3900 | 540 1000 | 1011  | 1022  | 1033  | 1044  | 1055  | 1066  | 1077  | 1088  | 1099  |       |
| 101  | 1110     | 1121  | 1132  | 1143  | 1154  | 1165  | 1176  | 1187  | 1198  | 1209  |       |
| 102  | 1220     | 1231  | 1242  | 1253  | 1264  | 1275  | 1286  | 1297  | 1308  | 1319  |       |
| 103  | 1330     | 1341  | 1352  | 1363  | 1374  | 1385  | 1396  | 1407  | 1418  | 1429  |       |
| 104  | 1440     | 1451  | 1462  | 1473  | 1484  | 1495  | 1506  | 1517  | 1528  | 1539  |       |
| 105  | 1550     | 1561  | 1572  | 1583  | 1594  | 1605  | 1616  | 1627  | 1638  | 1649  |       |
| 106  | 1660     | 1671  | 1682  | 1693  | 1704  | 1715  | 1726  | 1737  | 1748  | 1759  |       |
| 107  | 1770     | 1781  | 1792  | 1803  | 1814  | 1825  | 1836  | 1847  | 1858  | 1869  |       |
| 108  | 1880     | 1891  | 1902  | 1913  | 1924  | 1935  | 1946  | 1957  | 1968  | 1979  |       |
| 109  | 1990     | 2001  | 2012  | 2023  | 2034  | 2045  | 2056  | 2067  | 2078  | 2089  |       |
| 3910 | 541 1000 | 1011  | 1022  | 1033  | 1044  | 1055  | 1066  | 1077  | 1088  | 1099  |       |
| 111  | 1110     | 1121  | 1132  | 1143  | 1154  | 1165  | 1176  | 1187  | 1198  | 1209  |       |
| 112  | 1220     | 1231  | 1242  | 1253  | 1264  | 1275  | 1286  | 1297  | 1308  | 1319  |       |
| 113  | 1330     | 1341  | 1352  | 1363  | 1374  | 1385  | 1396  | 1407  | 1418  | 1429  |       |
| 114  | 1440     | 1451  | 1462  | 1473  | 1484  | 1495  | 1506  | 1517  | 1528  | 1539  |       |
| 115  | 1550     | 1561  | 1572  | 1583  | 1594  | 1605  | 1616  | 1627  | 1638  | 1649  |       |
| 116  | 1660     | 1671  | 1682  | 1693  | 1704  | 1715  | 1726  | 1737  | 1748  | 1759  |       |
| 117  | 1770     | 1781  | 1792  | 1803  | 1814  | 1825  | 1836  | 1847  | 1858  | 1869  |       |
| 118  | 1880     | 1891  | 1902  | 1913  | 1924  | 1935  | 1946  | 1957  | 1968  | 1979  |       |
| 119  | 1990     | 2001  | 2012  | 2023  | 2034  | 2045  | 2056  | 2067  | 2078  | 2089  |       |
| 3920 | 542 1000 | 1011  | 1022  | 1033  | 1044  | 1055  | 1066  | 1077  | 1088  | 1099  |       |
| 121  | 1110     | 1121  | 1132  | 1143  | 1154  | 1165  | 1176  | 1187  | 1198  | 1209  |       |
| 122  | 1220     | 1231  | 1242  | 1253  | 1264  | 1275  | 1286  | 1297  | 1308  | 1319  |       |
| 123  | 1330     | 1341  | 1352  | 1363  | 1374  | 1385  | 1396  | 1407  | 1418  | 1429  |       |
| 124  | 1440     | 1451  | 1462  | 1473  | 1484  | 1495  | 1506  | 1517  | 1528  | 1539  |       |
| 125  | 1550     | 1561  | 1572  | 1583  | 1594  | 1605  | 1616  | 1627  | 1638  | 1649  |       |
| 126  | 1660     | 1671  | 1682  | 1693  | 1704  | 1715  | 1726  | 1737  | 1748  | 1759  |       |
| 127  | 1770     | 1781  | 1792  | 1803  | 1814  | 1825  | 1836  | 1847  | 1858  | 1869  |       |
| 128  | 1880     | 1891  | 1902  | 1913  | 1924  | 1935  | 1946  | 1957  | 1968  | 1979  |       |
| 129  | 1990     | 2001  | 2012  | 2023  | 2034  | 2045  | 2056  | 2067  | 2078  | 2089  |       |
| 3930 | 543 1000 | 1011  | 1022  | 1033  | 1044  | 1055  | 1066  | 1077  | 1088  | 1099  |       |
| 131  | 1110     | 1121  | 1132  | 1143  | 1154  | 1165  | 1176  | 1187  | 1198  | 1209  |       |
| 132  | 1220     | 1231  | 1242  | 1253  | 1264  | 1275  | 1286  | 1297  | 1308  | 1319  |       |
| 133  | 1330     | 1341  | 1352  | 1363  | 1374  | 1385  | 1396  | 1407  | 1418  | 1429  |       |
| 134  | 1440     | 1451  | 1462  | 1473  | 1484  | 1495  | 1506  | 1517  | 1528  | 1539  |       |
| 135  | 1550     | 1561  | 1572  | 1583  | 1594  | 1605  | 1616  | 1627  | 1638  | 1649  |       |
| 136  | 1660     | 1671  | 1682  | 1693  | 1704  | 1715  | 1726  | 1737  | 1748  | 1759  |       |
| 137  | 1770     | 1781  | 1792  | 1803  | 1814  | 1825  | 1836  | 1847  | 1858  | 1869  |       |
| 138  | 1880     | 1891  | 1902  | 1913  | 1924  | 1935  | 1946  | 1957  | 1968  | 1979  |       |
| 139  | 1990     | 2001  | 2012  | 2023  | 2034  | 2045  | 2056  | 2067  | 2078  | 2089  |       |
| 3940 | 544 1000 | 1011  | 1022  | 1033  | 1044  | 1055  | 1066  | 1077  | 1088  | 1099  |       |
| 141  | 1110     | 1121  | 1132  | 1143  | 1154  | 1165  | 1176  | 1187  | 1198  | 1209  |       |
| 142  | 1220     | 1231  | 1242  | 1253  | 1264  | 1275  | 1286  | 1297  | 1308  | 1319  |       |
| 143  | 1330     | 1341  | 1352  | 1363  | 1374  | 1385  | 1396  | 1407  | 1418  | 1429  |       |
| 144  | 1440     | 1451  | 1462  | 1473  | 1484  | 1495  | 1506  | 1517  | 1528  | 1539  |       |
| 145  | 1550     | 1561  | 1572  | 1583  | 1594  | 1605  | 1616  | 1627  | 1638  | 1649  |       |
| 146  | 1660     | 1671  | 1682  | 1693  | 1704  | 1715  | 1726  | 1737  | 1748  | 1759  |       |
| 147  | 1770     | 1781  | 1792  | 1803  | 1814  | 1825  | 1836  | 1847  | 1858  | 1869  |       |
| 148  | 1880     | 1891  | 1902  | 1913  | 1924  | 1935  | 1946  | 1957  | 1968  | 1979  |       |
| 149  | 1990     | 2001  | 2012  | 2023  | 2034  | 2045  | 2056  | 2067  | 2078  | 2089  |       |
| 3950 | 545 1000 | 1011  | 1022  | 1033  | 1044  | 1055  | 1066  | 1077  | 1088  | 1099  |       |
| 151  | 1110     | 1121  | 1132  | 1143  | 1154  | 1165  | 1176  | 1187  | 1198  | 1209  |       |
| 152  | 1220     | 1231  | 1242  | 1253  | 1264  | 1275  | 1286  | 1297  | 1308  | 1319  |       |
| 153  | 1330     | 1341  | 1352  | 1363  | 1374  | 1385  | 1396  | 1407  | 1418  | 1429  |       |
| 154  | 1440     | 1451  | 1462  | 1473  | 1484  | 1495  | 1506  | 1517  | 1528  | 1539  |       |
| 155  | 1550     | 1561  | 1572  | 1583  | 1594  | 1605  | 1616  | 1627  | 1638  | 1649  |       |
| 156  | 1660     | 1671  | 1682  | 1693  | 1704  | 1715  | 1726  | 1737  | 1748  | 1759  |       |
| 157  | 1770     | 1781  | 1792  | 1803  | 1814  | 1825  | 1836  | 1847  | 1858  | 1869  |       |
| 158  | 1880     | 1891  | 1902  | 1913  | 1924  | 1935  | 1946  | 1957  | 1968  | 1979  |       |
| 159  | 1990     | 2001  | 2012  | 2023  | 2034  | 2045  | 2056  | 2067  | 2078  | 2089  |       |
| 3960 | 546 1000 | 1011  | 1022  | 1033  | 1044  | 1055  | 1066  | 1077  | 1088  | 1099  |       |
| 161  | 1110     | 1121  | 1132  | 1143  | 1154  | 1165  | 1176  | 1187  | 1198  | 1209  |       |



| N.   | 0          | 1    | 2        | 3       | 4    | 5       | 6    | 7    | 8    | 9    | P. P. |
|------|------------|------|----------|---------|------|---------|------|------|------|------|-------|
| 3900 | 591 0646   | 0757 | 0869     | 0980    | 1091 | 1203    | 1314 | 1426 | 1537 | 1648 |       |
| 01   | 1760       | 1871 | 1982     | 2093    | 2205 | 2316    | 2427 | 2539 | 2650 | 2761 |       |
| 02   | 2873       | 2984 | 3095     | 3207    | 3318 | 3429    | 3541 | 3652 | 3764 | 3875 |       |
| 03   | 3986       | 4097 | 4208     | 4319    | 4431 | 4542    | 4654 | 4765 | 4876 | 4987 |       |
| 04   | 5098       | 5209 | 5321     | 5432    | 5543 | 5654    | 5765 | 5876 | 5987 | 6098 |       |
| 05   | 6210       | 6322 | 6433     | 6544    | 6655 | 6766    | 6877 | 6988 | 7099 | 7210 |       |
| 06   | 7322       | 7434 | 7545     | 7656    | 7767 | 7878    | 7989 | 8100 | 8211 | 8322 | 112   |
| 07   | 8434       | 8545 | 8656     | 8768    | 8879 | 8990    | 9101 | 9212 | 9323 | 9434 | 113   |
| 08   | 9546       | 9657 | 9768     | 9879    | 9990 | 0101    | 0212 | 0323 | 0434 | 0545 | 114   |
| 09   | 592 0657   | 0768 | 0879     | 0990    | 1101 | 1212    | 1323 | 1434 | 1545 | 1656 | 115   |
| 3910 | 592 1768   | 1879 | 1990     | 2101    | 2212 | 2323    | 2434 | 2545 | 2656 | 2767 | 116   |
| 11   | 2878       | 2989 | 3100     | 3211    | 3322 | 3433    | 3544 | 3655 | 3766 | 3877 | 117   |
| 12   | 3988       | 4099 | 4210     | 4321    | 4432 | 4543    | 4654 | 4765 | 4876 | 4987 | 118   |
| 13   | 5098       | 5209 | 5320     | 5431    | 5542 | 5653    | 5764 | 5875 | 5986 | 6097 | 119   |
| 14   | 6208       | 6319 | 6430     | 6541    | 6652 | 6763    | 6874 | 6985 | 7096 | 7207 | 120   |
| 15   | 7318       | 7429 | 7540     | 7651    | 7762 | 7873    | 7984 | 8095 | 8206 | 8317 | 121   |
| 16   | 8427       | 8538 | 8649     | 8760    | 8871 | 8982    | 9093 | 9204 | 9315 | 9426 | 122   |
| 17   | 9536       | 9647 | 9757     | 9868    | 9979 | 0090    | 0201 | 0312 | 0423 | 0534 | 123   |
| 18   | 593 0644   | 0755 | 0866     | 0977    | 1088 | 1199    | 1310 | 1421 | 1532 | 1643 | 124   |
| 19   | 1753       | 1864 | 1974     | 2085    | 2196 | 2307    | 2418 | 2529 | 2640 | 2751 | 125   |
| 3920 | 593 2861   | 2971 | 3082     | 3193    | 3304 | 3415    | 3526 | 3637 | 3748 | 3859 | 126   |
| 21   | 3968       | 4079 | 4190     | 4301    | 4412 | 4523    | 4634 | 4745 | 4856 | 4967 | 127   |
| 22   | 5076       | 5187 | 5297     | 5408    | 5519 | 5630    | 5741 | 5852 | 5963 | 6074 | 128   |
| 23   | 6183       | 6294 | 6404     | 6515    | 6626 | 6737    | 6848 | 6959 | 7070 | 7181 | 129   |
| 24   | 7290       | 7401 | 7511     | 7622    | 7733 | 7844    | 7955 | 8066 | 8177 | 8288 | 130   |
| 25   | 8397       | 8507 | 8618     | 8729    | 8839 | 8950    | 9061 | 9172 | 9283 | 9394 | 131   |
| 26   | 9503       | 9614 | 9724     | 9835    | 9945 | 0056    | 0167 | 0278 | 0389 | 0490 | 132   |
| 27   | 594 0609   | 0720 | 0830     | 0941    | 1051 | 1162    | 1273 | 1384 | 1495 | 1606 | 133   |
| 28   | 1715       | 1825 | 1936     | 2046    | 2157 | 2268    | 2379 | 2489 | 2590 | 2701 | 134   |
| 29   | 2820       | 2931 | 3041     | 3152    | 3263 | 3374    | 3485 | 3596 | 3707 | 3818 | 135   |
| 3930 | 594 4926   | 4936 | 4947     | 4957    | 4968 | 4978    | 4989 | 4990 | 5001 | 5012 | 136   |
| 31   | 5030       | 5141 | 5251     | 5362    | 5472 | 5583    | 5694 | 5805 | 5916 | 6027 | 137   |
| 32   | 6135       | 6246 | 6356     | 6466    | 6577 | 6687    | 6798 | 6909 | 7020 | 7131 | 138   |
| 33   | 7239       | 7350 | 7460     | 7571    | 7682 | 7793    | 7904 | 8015 | 8126 | 8237 | 139   |
| 34   | 8344       | 8454 | 8564     | 8675    | 8785 | 8896    | 9007 | 9118 | 9229 | 9340 | 140   |
| 35   | 9447       | 9558 | 9668     | 9778    | 9889 | 9999    | 0110 | 0221 | 0332 | 0443 | 141   |
| 36   | 595 0551   | 0661 | 0772     | 0882    | 0992 | 1103    | 1214 | 1325 | 1436 | 1547 | 142   |
| 37   | 1654       | 1764 | 1875     | 1985    | 2096 | 2206    | 2317 | 2428 | 2539 | 2650 | 143   |
| 38   | 2757       | 2867 | 2978     | 3088    | 3198 | 3309    | 3419 | 3530 | 3641 | 3752 | 144   |
| 39   | 3860       | 3970 | 4080     | 4191    | 4301 | 4412    | 4523 | 4634 | 4745 | 4856 | 145   |
| 3940 | 595 4962   | 5072 | 5183     | 5293    | 5404 | 5515    | 5626 | 5737 | 5848 | 5959 | 146   |
| 41   | 6064       | 6175 | 6285     | 6395    | 6506 | 6617    | 6728 | 6839 | 6950 | 7061 | 147   |
| 42   | 7166       | 7276 | 7387     | 7497    | 7607 | 7717    | 7828 | 7939 | 8050 | 8161 | 148   |
| 43   | 8268       | 8378 | 8488     | 8598    | 8708 | 8819    | 8929 | 9040 | 9151 | 9262 | 149   |
| 44   | 9369       | 9479 | 9589     | 9699    | 9810 | 9920    | 0031 | 0142 | 0253 | 0364 | 150   |
| 45   | 596 0470   | 0580 | 0690     | 0800    | 0910 | 1020    | 1131 | 1241 | 1352 | 1463 | 151   |
| 46   | 1571       | 1681 | 1791     | 1901    | 2011 | 2122    | 2233 | 2344 | 2455 | 2566 | 152   |
| 47   | 2671       | 2781 | 2891     | 3001    | 3111 | 3222    | 3333 | 3444 | 3555 | 3666 | 153   |
| 48   | 3771       | 3881 | 3991     | 4101    | 4211 | 4322    | 4433 | 4544 | 4655 | 4766 | 154   |
| 49   | 4871       | 4981 | 5091     | 5201    | 5311 | 5422    | 5533 | 5644 | 5755 | 5866 | 155   |
| 3950 | 596 5971   | 6081 | 6191     | 6301    | 6411 | 6521    | 6631 | 6741 | 6852 | 6963 | 156   |
| N.   | 0          | 1    | 2        | 3       | 4    | 5       | 6    | 7    | 8    | 9    | P. P. |
| 00   | 10° 50' 0" | 3900 | 1° 5' 0" | 8.4 685 | 5499 | T. 6066 |      |      |      |      |       |
| 01   | 10 51 40   | 3910 | 1 5 10   |         | 5489 | 6059    |      |      |      |      |       |
| 02   | 10 53 20   | 3920 | 1 5 20   |         | 5487 | 6072    |      |      |      |      |       |
| 03   | 10 55 0    | 3930 | 1 5 30   |         | 5486 | 6074    |      |      |      |      |       |
| 04   | 10 56 40   | 3940 | 1 5 40   |         | 5485 | 6077    |      |      |      |      |       |



| N.    | 0           | 1    | 2    | 3    | 4     | 5         | 6      | 7    | 8    | 9      | P. P. |
|-------|-------------|------|------|------|-------|-----------|--------|------|------|--------|-------|
| 3950  | 596 5971    | 6081 | 6191 | 6301 | 6411  | 6521      | 6631   | 6741 | 6851 | 6960   |       |
| 51    | 7071        | 7181 | 7291 | 7401 | 7511  | 7621      | 7731   | 7841 | 7951 | 8060   |       |
| 52    | 8169        | 8279 | 8388 | 8499 | 8609  | 8719      | 8829   | 8939 | 9048 | 9158   |       |
| 53    | 9268        | 9378 | 9488 | 9598 | 9708  | 9817      | 9927   | 0037 | 0147 | 0257   |       |
| 54    | 597 0367    | 0476 | 0586 | 0696 | 0806  | 0916      | 1026   | 1135 | 1245 | 1355   |       |
| 55    | 1465        | 1575 | 1684 | 1794 | 1904  | 2014      | 2124   | 2234 | 2344 | 2454   |       |
| 56    | 2564        | 2674 | 2784 | 2894 | 3004  | 3114      | 3224   | 3334 | 3444 | 3554   | 110   |
| 57    | 3664        | 3774 | 3884 | 3994 | 4104  | 4214      | 4324   | 4434 | 4544 | 4654   | 1 110 |
| 58    | 4764        | 4874 | 4984 | 5094 | 5204  | 5314      | 5424   | 5534 | 5644 | 5754   | 2 110 |
| 59    | 5864        | 5974 | 6084 | 6194 | 6304  | 6414      | 6524   | 6634 | 6744 | 6854   | 3 110 |
| 3960  | 597 6974    | 7084 | 7194 | 7304 | 7414  | 7524      | 7634   | 7744 | 7854 | 7964   | 4 110 |
| 61    | 8074        | 8184 | 8294 | 8404 | 8514  | 8624      | 8734   | 8844 | 8954 | 9064   | 5 110 |
| 62    | 9174        | 9284 | 9394 | 9504 | 9614  | 9724      | 9834   | 9944 | 0054 | 0164   | 6 110 |
| 63    | 598 0274    | 0384 | 0494 | 0604 | 0714  | 0824      | 0934   | 1044 | 1154 | 1264   | 7 110 |
| 64    | 1374        | 1484 | 1594 | 1704 | 1814  | 1924      | 2034   | 2144 | 2254 | 2364   | 8 110 |
| 65    | 2474        | 2584 | 2694 | 2804 | 2914  | 3024      | 3134   | 3244 | 3354 | 3464   | 9 110 |
| 66    | 3574        | 3684 | 3794 | 3904 | 4014  | 4124      | 4234   | 4344 | 4454 | 4564   |       |
| 67    | 4674        | 4784 | 4894 | 5004 | 5114  | 5224      | 5334   | 5444 | 5554 | 5664   |       |
| 68    | 5774        | 5884 | 5994 | 6104 | 6214  | 6324      | 6434   | 6544 | 6654 | 6764   |       |
| 69    | 6874        | 6984 | 7094 | 7204 | 7314  | 7424      | 7534   | 7644 | 7754 | 7864   |       |
| 3970  | 598 7974    | 8084 | 8194 | 8304 | 8414  | 8524      | 8634   | 8744 | 8854 | 8964   |       |
| 71    | 9074        | 9184 | 9294 | 9404 | 9514  | 9624      | 9734   | 9844 | 9954 | 0064   | 1 110 |
| 72    | 599 0174    | 0284 | 0394 | 0504 | 0614  | 0724      | 0834   | 0944 | 1054 | 1164   | 2 110 |
| 73    | 1274        | 1384 | 1494 | 1604 | 1714  | 1824      | 1934   | 2044 | 2154 | 2264   | 3 110 |
| 74    | 2374        | 2484 | 2594 | 2704 | 2814  | 2924      | 3034   | 3144 | 3254 | 3364   | 4 110 |
| 75    | 3474        | 3584 | 3694 | 3804 | 3914  | 4024      | 4134   | 4244 | 4354 | 4464   | 5 110 |
| 76    | 4574        | 4684 | 4794 | 4904 | 5014  | 5124      | 5234   | 5344 | 5454 | 5564   | 6 110 |
| 77    | 5674        | 5784 | 5894 | 6004 | 6114  | 6224      | 6334   | 6444 | 6554 | 6664   | 7 110 |
| 78    | 6774        | 6884 | 6994 | 7104 | 7214  | 7324      | 7434   | 7544 | 7654 | 7764   | 8 110 |
| 79    | 7874        | 7984 | 8094 | 8204 | 8314  | 8424      | 8534   | 8644 | 8754 | 8864   | 9 110 |
| 3980  | 599 8974    | 9084 | 9194 | 9304 | 9414  | 9524      | 9634   | 9744 | 9854 | 9964   |       |
| 81    | 0074        | 0184 | 0294 | 0404 | 0514  | 0624      | 0734   | 0844 | 0954 | 1064   |       |
| 82    | 0174        | 0284 | 0394 | 0504 | 0614  | 0724      | 0834   | 0944 | 1054 | 1164   |       |
| 83    | 0274        | 0384 | 0494 | 0604 | 0714  | 0824      | 0934   | 1044 | 1154 | 1264   |       |
| 84    | 0374        | 0484 | 0594 | 0704 | 0814  | 0924      | 1034   | 1144 | 1254 | 1364   |       |
| 85    | 0474        | 0584 | 0694 | 0804 | 0914  | 1024      | 1134   | 1244 | 1354 | 1464   |       |
| 86    | 0574        | 0684 | 0794 | 0904 | 1014  | 1124      | 1234   | 1344 | 1454 | 1564   |       |
| 87    | 0674        | 0784 | 0894 | 1004 | 1114  | 1224      | 1334   | 1444 | 1554 | 1664   | 1 110 |
| 88    | 0774        | 0884 | 0994 | 1104 | 1214  | 1324      | 1434   | 1544 | 1654 | 1764   | 2 110 |
| 89    | 0874        | 0984 | 1094 | 1204 | 1314  | 1424      | 1534   | 1644 | 1754 | 1864   | 3 110 |
| 3990  | 0974        | 1084 | 1194 | 1304 | 1414  | 1524      | 1634   | 1744 | 1854 | 1964   |       |
| 91    | 1074        | 1184 | 1294 | 1404 | 1514  | 1624      | 1734   | 1844 | 1954 | 2064   |       |
| 92    | 1174        | 1284 | 1394 | 1504 | 1614  | 1724      | 1834   | 1944 | 2054 | 2164   |       |
| 93    | 1274        | 1384 | 1494 | 1604 | 1714  | 1824      | 1934   | 2044 | 2154 | 2264   |       |
| 94    | 1374        | 1484 | 1594 | 1704 | 1814  | 1924      | 2034   | 2144 | 2254 | 2364   |       |
| 95    | 1474        | 1584 | 1694 | 1804 | 1914  | 2024      | 2134   | 2244 | 2354 | 2464   |       |
| 96    | 1574        | 1684 | 1794 | 1904 | 2014  | 2124      | 2234   | 2344 | 2454 | 2564   |       |
| 97    | 1674        | 1784 | 1894 | 2004 | 2114  | 2224      | 2334   | 2444 | 2554 | 2664   |       |
| 98    | 1774        | 1884 | 1994 | 2104 | 2214  | 2324      | 2434   | 2544 | 2654 | 2764   |       |
| 99    | 1874        | 1984 | 2094 | 2204 | 2314  | 2424      | 2534   | 2644 | 2754 | 2864   |       |
| 4000  | 1974        | 2084 | 2194 | 2304 | 2414  | 2524      | 2634   | 2744 | 2854 | 2964   |       |
| N.    | 0           | 1    | 2    | 3    | 4     | 5         | 6      | 7    | 8    | 9      | P. P. |
| 39500 | 10° 58' 20" |      |      |      | 39500 | 1° 5' 50" | 8.4625 | 5481 |      | 1.6130 |       |
| 39600 | 11 0 0      |      |      |      | 39600 | 1 6 0     |        | 5481 |      | 6130   |       |
| 39700 | 11 1 40     |      |      |      | 39700 | 1 6 10    |        | 5481 |      | 6131   |       |
| 39800 | 11 1 20     |      |      |      | 39800 | 1 6 20    |        | 5479 |      | 6131   |       |
| 39900 | 11 5 0      |      |      |      | 39900 | 1 6 30    |        | 5478 |      | 6130   |       |



| N.    | 0          | 1    | 2    | 3    | 4     | 5          | 6     | 7     | 8     | 9     | P.                    |
|-------|------------|------|------|------|-------|------------|-------|-------|-------|-------|-----------------------|
| 4000  | 602 0600   | 0708 | 0817 | 0926 | 1034  | 1143       | 1251  | 1360  | 1468  | 1577  |                       |
| 01    | 1686       | 1794 | 1903 | 2011 | 2120  | 2228       | 2337  | 2445  | 2554  | 2662  |                       |
| 02    | 2771       | 2879 | 2988 | 3096 | 3205  | 3313       | 3422  | 3530  | 3639  | 3747  |                       |
| 03    | 3856       | 3964 | 4073 | 4181 | 4290  | 4398       | 4507  | 4615  | 4724  | 4832  |                       |
| 04    | 4941       | 5049 | 5158 | 5266 | 5375  | 5483       | 5591  | 5700  | 5808  | 5917  |                       |
| 05    | 6025       | 6134 | 6242 | 6351 | 6459  | 6567       | 6676  | 6784  | 6893  | 7001  |                       |
| 06    | 7109       | 7218 | 7326 | 7435 | 7543  | 7651       | 7760  | 7868  | 7977  | 8085  |                       |
| 07    | 8193       | 8302 | 8410 | 8519 | 8627  | 8735       | 8844  | 8952  | 9060  | 9169  | 10                    |
| 08    | 9277       | 9385 | 9494 | 9602 | 9711  | 9819       | 9927  | 10036 | 10144 | 10252 | 11                    |
| 09    | 603 0361   | 0469 | 0577 | 0686 | 0794  | 0902       | 1010  | 1119  | 1227  | 1335  | 21                    |
| 4010  | 603 1444   | 1552 | 1660 | 1769 | 1877  | 1985       | 2093  | 2202  | 2310  | 2418  | 31                    |
| 11    | 2527       | 2635 | 2743 | 2851 | 2960  | 3068       | 3176  | 3284  | 3393  | 3501  | 41                    |
| 12    | 3609       | 3717 | 3826 | 3934 | 4042  | 4150       | 4259  | 4367  | 4475  | 4583  | 51                    |
| 13    | 4692       | 4800 | 4908 | 5016 | 5124  | 5233       | 5341  | 5449  | 5557  | 5665  | 61                    |
| 14    | 5774       | 5882 | 5990 | 6098 | 6206  | 6315       | 6423  | 6531  | 6639  | 6747  | 71                    |
| 15    | 6855       | 6964 | 7072 | 7180 | 7288  | 7396       | 7504  | 7613  | 7721  | 7829  | 81                    |
| 16    | 7937       | 8045 | 8153 | 8261 | 8370  | 8478       | 8586  | 8694  | 8802  | 8910  | 91                    |
| 17    | 9018       | 9126 | 9235 | 9343 | 9451  | 9559       | 9667  | 9775  | 9883  | 9991  |                       |
| 18    | 604 0099   | 0207 | 0315 | 0424 | 0532  | 0640       | 0748  | 0856  | 0964  | 1072  |                       |
| 19    | 1180       | 1288 | 1396 | 1504 | 1612  | 1720       | 1828  | 1936  | 2044  | 2152  |                       |
| 4020  | 604 2261   | 2369 | 2477 | 2585 | 2693  | 2801       | 2909  | 3017  | 3125  | 3233  |                       |
| 21    | 3341       | 3449 | 3557 | 3665 | 3773  | 3881       | 3989  | 4097  | 4205  | 4313  | 100                   |
| 22    | 4421       | 4529 | 4637 | 4745 | 4853  | 4961       | 5068  | 5176  | 5284  | 5392  | 11                    |
| 23    | 5500       | 5608 | 5716 | 5824 | 5932  | 6040       | 6148  | 6256  | 6364  | 6472  | 21                    |
| 24    | 6580       | 6688 | 6796 | 6904 | 7011  | 7119       | 7227  | 7335  | 7443  | 7551  | 31                    |
| 25    | 7659       | 7767 | 7875 | 7983 | 8090  | 8198       | 8306  | 8414  | 8522  | 8630  | 41                    |
| 26    | 8738       | 8846 | 8953 | 9061 | 9169  | 9277       | 9385  | 9493  | 9601  | 9708  | 51                    |
| 27    | 9816       | 9924 | 1002 | 1110 | 1218  | 1326       | 1434  | 1542  | 1650  | 1758  | 61                    |
| 28    | 605 0805   | 1002 | 1110 | 1218 | 1326  | 1434       | 1542  | 1650  | 1758  | 1866  | 71                    |
| 29    | 1973       | 2080 | 2188 | 2296 | 2404  | 2512       | 2619  | 2727  | 2835  | 2943  | 81                    |
| 4030  | 605 3050   | 3158 | 3266 | 3374 | 3482  | 3589       | 3697  | 3805  | 3912  | 4020  | 91                    |
| 31    | 4128       | 4236 | 4343 | 4451 | 4559  | 4667       | 4774  | 4882  | 4990  | 5098  |                       |
| 32    | 5205       | 5313 | 5421 | 5528 | 5636  | 5744       | 5851  | 5959  | 6067  | 6175  |                       |
| 33    | 6282       | 6390 | 6498 | 6605 | 6713  | 6821       | 6928  | 7036  | 7144  | 7251  |                       |
| 34    | 7359       | 7467 | 7574 | 7682 | 7790  | 7897       | 8005  | 8112  | 8220  | 8328  |                       |
| 35    | 8435       | 8543 | 8651 | 8758 | 8866  | 8974       | 9081  | 9189  | 9296  | 9404  |                       |
| 36    | 9512       | 9619 | 9727 | 9834 | 9942  | 10050      | 10157 | 10265 | 10372 | 10480 |                       |
| 37    | 606 0587   | 0695 | 0803 | 0910 | 1018  | 1125       | 1233  | 1340  | 1448  | 1556  | 107                   |
| 38    | 1663       | 1771 | 1878 | 1986 | 2093  | 2201       | 2308  | 2416  | 2523  | 2631  | 11                    |
| 39    | 2739       | 2846 | 2954 | 3061 | 3169  | 3276       | 3384  | 3491  | 3599  | 3706  | 21                    |
| 4040  | 606 3814   | 3921 | 4029 | 4136 | 4244  | 4351       | 4459  | 4566  | 4674  | 4781  | 31                    |
| 41    | 4889       | 4996 | 5103 | 5211 | 5318  | 5426       | 5534  | 5641  | 5748  | 5856  | 41                    |
| 42    | 5963       | 6071 | 6178 | 6285 | 6393  | 6500       | 6608  | 6715  | 6823  | 6930  | 51                    |
| 43    | 7037       | 7145 | 7252 | 7360 | 7467  | 7574       | 7682  | 7789  | 7897  | 8004  | 61                    |
| 44    | 8111       | 8219 | 8326 | 8434 | 8541  | 8648       | 8756  | 8863  | 8971  | 9078  | 71                    |
| 45    | 9185       | 9293 | 9400 | 9507 | 9615  | 9722       | 9829  | 9937  | 10044 | 10151 | 81                    |
| 46    | 607 0259   | 0366 | 0473 | 0581 | 0688  | 0795       | 0903  | 1010  | 1117  | 1225  | 91                    |
| 47    | 1332       | 1439 | 1547 | 1654 | 1761  | 1869       | 1976  | 2083  | 2190  | 2298  |                       |
| 48    | 2405       | 2512 | 2620 | 2727 | 2834  | 2941       | 3049  | 3156  | 3263  | 3371  |                       |
| 49    | 3478       | 3585 | 3692 | 3800 | 3907  | 4014       | 4121  | 4229  | 4336  | 4443  |                       |
| 4050  | 607 4550   | 4657 | 4765 | 4872 | 4979  | 5086       | 5194  | 5301  | 5408  | 5515  |                       |
| N.    | 0          | 1    | 2    | 3    | 4     | 5          | 6     | 7     | 8     | 9     | P. I.                 |
| 40000 | 11° 6' 40" |      |      |      | 40000 | 11° 6' 40" |       |       |       |       | N. 4.685 5476 T. 6293 |
| 40100 | 11 8 20    |      |      |      | 40100 | 11 6 50    |       |       |       |       | 5475 6296             |
| 40200 | 11 10 0    |      |      |      | 40200 | 1 7 0      |       |       |       |       | 5474 6299             |
| 40300 | 11 11 40   |      |      |      | 40300 | 1 7 10     |       |       |       |       | 5472 6301             |
| 40400 | 11 13 20   |      |      |      | 40400 | 1 7 20     |       |       |       |       | 5471 6304             |



| N.    | 0          | 1    | 2    | 3    | 4         | 5       | 6    | 7       | 8    | 9    | P. P.  |
|-------|------------|------|------|------|-----------|---------|------|---------|------|------|--------|
| 4050  | 607 4550   | 4657 | 4765 | 4872 | 4979      | 5086    | 5194 | 5301    | 5408 | 5515 |        |
| 51    | 5622       | 5730 | 5837 | 5944 | 6051      | 6158    | 6266 | 6373    | 6480 | 6587 |        |
| 52    | 6694       | 6802 | 6909 | 7016 | 7123      | 7230    | 7337 | 7445    | 7552 | 7659 |        |
| 53    | 7766       | 7873 | 7980 | 8087 | 8195      | 8302    | 8409 | 8516    | 8623 | 8730 |        |
| 54    | 8837       | 8945 | 9052 | 9159 | 9266      | 9373    | 9480 | 9587    | 9694 | 9801 |        |
| 55    | 9909       | 0016 | 0123 | 0230 | 0337      | 0444    | 0551 | 0658    | 0765 | 0872 |        |
| 56    | 608 0979   | 1087 | 1194 | 1301 | 1408      | 1515    | 1622 | 1729    | 1836 | 1943 |        |
| 57    | 2050       | 2157 | 2264 | 2371 | 2478      | 2585    | 2692 | 2799    | 2906 | 3013 | 107    |
| 58    | 3120       | 3227 | 3334 | 3441 | 3548      | 3656    | 3763 | 3870    | 3977 | 4084 | 1 10.7 |
| 59    | 4191       | 4298 | 4404 | 4511 | 4618      | 4725    | 4832 | 4939    | 5046 | 5153 | 2 21.4 |
| 4060  | 608 5260   | 5367 | 5474 | 5581 | 5688      | 5795    | 5902 | 6009    | 6116 | 6223 | 3 32.1 |
| 61    | 6330       | 6437 | 6544 | 6651 | 6758      | 6865    | 6972 | 7078    | 7185 | 7292 | 4 42.8 |
| 62    | 7399       | 7506 | 7613 | 7720 | 7827      | 7934    | 8041 | 8148    | 8254 | 8361 | 5 53.5 |
| 63    | 8468       | 8575 | 8682 | 8789 | 8896      | 9003    | 9110 | 9216    | 9323 | 9430 | 6 64.2 |
| 64    | 9537       | 9644 | 9751 | 9858 | 9964      | 0071    | 0178 | 0285    | 0392 | 0499 | 7 74.9 |
| 65    | 609 0605   | 0712 | 0819 | 0926 | 1033      | 1140    | 1246 | 1353    | 1460 | 1567 | 8 85.6 |
| 66    | 1674       | 1781 | 1887 | 1994 | 2101      | 2208    | 2315 | 2421    | 2528 | 2635 | 9 96.3 |
| 67    | 2742       | 2849 | 2955 | 3062 | 3169      | 3276    | 3382 | 3489    | 3596 | 3703 |        |
| 68    | 3809       | 3916 | 4023 | 4130 | 4236      | 4343    | 4450 | 4557    | 4663 | 4770 |        |
| 69    | 4877       | 4984 | 5090 | 5197 | 5304      | 5411    | 5517 | 5624    | 5731 | 5837 |        |
| 4070  | 609 5944   | 6051 | 6157 | 6264 | 6371      | 6478    | 6584 | 6691    | 6798 | 6904 |        |
| 71    | 7011       | 7118 | 7224 | 7331 | 7438      | 7544    | 7651 | 7758    | 7864 | 7971 | 106    |
| 72    | 8078       | 8184 | 8291 | 8398 | 8504      | 8611    | 8718 | 8824    | 8931 | 9037 | 1 10.6 |
| 73    | 9144       | 9251 | 9357 | 9464 | 9571      | 9677    | 9784 | 9890    | 9997 | 0104 | 2 21.2 |
| 74    | 610 0210   | 0317 | 0423 | 0530 | 0637      | 0743    | 0850 | 0956    | 1063 | 1170 | 3 31.8 |
| 75    | 1276       | 1383 | 1489 | 1596 | 1702      | 1809    | 1916 | 2022    | 2129 | 2235 | 4 42.4 |
| 76    | 2342       | 2448 | 2555 | 2661 | 2768      | 2874    | 2981 | 3088    | 3194 | 3301 | 5 53.0 |
| 77    | 3407       | 3514 | 3620 | 3727 | 3833      | 3940    | 4046 | 4153    | 4259 | 4366 | 6 63.6 |
| 78    | 4472       | 4579 | 4685 | 4792 | 4898      | 5005    | 5111 | 5218    | 5324 | 5431 | 7 74.2 |
| 79    | 5537       | 5644 | 5750 | 5856 | 5963      | 6069    | 6176 | 6282    | 6389 | 6495 | 8 84.8 |
| 4080  | 610 6602   | 6708 | 6815 | 6921 | 7027      | 7134    | 7240 | 7347    | 7453 | 7560 | 9 95.4 |
| 81    | 7666       | 7772 | 7879 | 7985 | 8092      | 8198    | 8304 | 8411    | 8517 | 8624 |        |
| 82    | 8730       | 8836 | 8943 | 9049 | 9156      | 9262    | 9368 | 9475    | 9581 | 9687 |        |
| 83    | 9794       | 9900 | 0007 | 0113 | 0219      | 0326    | 0432 | 0538    | 0645 | 0751 |        |
| 84    | 611 0857   | 0964 | 1070 | 1176 | 1283      | 1389    | 1495 | 1602    | 1708 | 1814 |        |
| 85    | 1921       | 2027 | 2133 | 2240 | 2346      | 2452    | 2558 | 2665    | 2771 | 2877 |        |
| 86    | 2984       | 3090 | 3196 | 3302 | 3409      | 3515    | 3621 | 3728    | 3834 | 3940 |        |
| 87    | 4046       | 4153 | 4259 | 4365 | 4471      | 4578    | 4684 | 4790    | 4896 | 5003 | 105    |
| 88    | 5109       | 5215 | 5321 | 5428 | 5534      | 5640    | 5746 | 5852    | 5959 | 6065 | 1 10.5 |
| 89    | 6171       | 6277 | 6384 | 6490 | 6596      | 6702    | 6808 | 6915    | 7021 | 7127 | 2 21.0 |
| 4090  | 611 7233   | 7339 | 7445 | 7552 | 7658      | 7764    | 7870 | 7976    | 8082 | 8189 | 3 31.5 |
| 91    | 8295       | 8401 | 8507 | 8613 | 8719      | 8826    | 8932 | 9038    | 9144 | 9250 | 4 42.0 |
| 92    | 9356       | 9462 | 9569 | 9675 | 9781      | 9887    | 9993 | 0099    | 0205 | 0311 | 5 52.5 |
| 93    | 612 0417   | 0524 | 0630 | 0736 | 0842      | 0948    | 1054 | 1160    | 1266 | 1372 | 6 63.0 |
| 94    | 1478       | 1584 | 1691 | 1797 | 1903      | 2009    | 2115 | 2221    | 2327 | 2433 | 7 73.5 |
| 95    | 2539       | 2645 | 2751 | 2857 | 2963      | 3069    | 3175 | 3281    | 3387 | 3493 | 8 84.0 |
| 96    | 3599       | 3706 | 3812 | 3918 | 4024      | 4130    | 4236 | 4342    | 4448 | 4554 | 9 94.5 |
| 97    | 4660       | 4766 | 4872 | 4978 | 5084      | 5190    | 5296 | 5402    | 5508 | 5614 |        |
| 98    | 5720       | 5826 | 5931 | 6037 | 6143      | 6249    | 6355 | 6461    | 6567 | 6673 |        |
| 99    | 6779       | 6885 | 6991 | 7097 | 7203      | 7309    | 7415 | 7521    | 7627 | 7733 |        |
| 4100  | 612 7839   | 7944 | 8050 | 8156 | 8262      | 8368    | 8474 | 8580    | 8686 | 8792 |        |
| N.    | 0          | 1    | 2    | 3    | 4         | 5       | 6    | 7       | 8    | 9    | P. P.  |
| 40500 | 11° 15' 0" |      |      | 4050 | 1° 7' 30" | 8.4.685 | 5470 | T. 6307 |      |      |        |
| 40600 | 11 16 40   |      |      | 4060 | 1 7 40    |         | 5468 | 6310    |      |      |        |
| 40700 | 11 18 20   |      |      | 4070 | 1 7 50    |         | 5467 | 6312    |      |      |        |
| 40800 | 11 20 0    |      |      | 4080 | 1 8 0     |         | 5465 | 6315    |      |      |        |
| 40900 | 11 21 40   |      |      | 4090 | 1 8 10    |         | 5464 | 6318    |      |      |        |



| N.   | 0           | 1    | 2    | 3    | 4    | 5         | 6      | 7    | 8       | 9    | P. P.  |
|------|-------------|------|------|------|------|-----------|--------|------|---------|------|--------|
| 4100 | 612 7839    | 7944 | 8050 | 8156 | 8262 | 8368      | 8474   | 8580 | 8686    | 8792 |        |
| 01   | 8898        | 9004 | 9109 | 9215 | 9321 | 9427      | 9533   | 9639 | 9745    | 9851 |        |
| 02   | 9957        | 0062 | 0168 | 0274 | 0380 | 0486      | 0592   | 0698 | 0804    | 0909 |        |
| 03   | 613 1015    | 1121 | 1227 | 1333 | 1439 | 1544      | 1650   | 1756 | 1862    | 1968 |        |
| 04   | 2074        | 2179 | 2285 | 2391 | 2497 | 2603      | 2708   | 2814 | 2920    | 3026 |        |
| 05   | 3132        | 3237 | 3343 | 3449 | 3555 | 3661      | 3766   | 3872 | 3978    | 4084 |        |
| 06   | 4189        | 4295 | 4401 | 4507 | 4613 | 4718      | 4824   | 4930 | 5036    | 5141 | 106    |
| 07   | 5247        | 5353 | 5459 | 5564 | 5670 | 5776      | 5881   | 5987 | 6093    | 6199 | 1 10.6 |
| 08   | 6304        | 6410 | 6516 | 6621 | 6727 | 6833      | 6939   | 7044 | 7150    | 7256 | 2 21.2 |
| 09   | 7361        | 7467 | 7573 | 7678 | 7784 | 7890      | 7996   | 8101 | 8207    | 8313 | 3 31.8 |
| 4110 | 613 8418    | 8524 | 8630 | 8735 | 8841 | 8947      | 9053   | 9158 | 9264    | 9369 | 4 42.4 |
| 11   | 9475        | 9580 | 9686 | 9792 | 9897 | 0003      | 0109   | 0214 | 0320    | 0425 | 5 53.0 |
| 12   | 614 0531    | 0637 | 0742 | 0848 | 0954 | 1059      | 1165   | 1270 | 1376    | 1482 | 6 63.6 |
| 13   | 1587        | 1693 | 1798 | 1904 | 2009 | 2115      | 2221   | 2326 | 2432    | 2537 | 7 74.2 |
| 14   | 2643        | 2748 | 2854 | 2960 | 3065 | 3171      | 3276   | 3382 | 3487    | 3593 | 8 84.8 |
| 15   | 3698        | 3804 | 3909 | 4015 | 4121 | 4226      | 4332   | 4437 | 4543    | 4648 | 9 95.4 |
| 16   | 4754        | 4859 | 4965 | 5070 | 5176 | 5281      | 5387   | 5492 | 5598    | 5704 |        |
| 17   | 5809        | 5914 | 6020 | 6125 | 6231 | 6336      | 6442   | 6547 | 6652    | 6758 |        |
| 18   | 6863        | 6969 | 7074 | 7180 | 7285 | 7391      | 7496   | 7602 | 7707    | 7813 |        |
| 19   | 7918        | 8023 | 8129 | 8234 | 8340 | 8445      | 8550   | 8656 | 8761    | 8867 |        |
| 4120 | 614 8972    | 9078 | 9183 | 9288 | 9394 | 9499      | 9605   | 9710 | 9815    | 9921 |        |
| 21   | 615 0026    | 0132 | 0237 | 0342 | 0448 | 0553      | 0658   | 0764 | 0869    | 0975 | 1 10.5 |
| 22   | 1080        | 1185 | 1291 | 1396 | 1501 | 1607      | 1712   | 1817 | 1923    | 2028 | 2 21.0 |
| 23   | 2133        | 2239 | 2344 | 2449 | 2555 | 2660      | 2765   | 2871 | 2976    | 3081 | 3 31.5 |
| 24   | 3187        | 3292 | 3397 | 3502 | 3608 | 3713      | 3818   | 3924 | 4029    | 4134 | 4 42.0 |
| 25   | 4240        | 4345 | 4450 | 4555 | 4661 | 4766      | 4871   | 4976 | 5082    | 5187 | 5 52.5 |
| 26   | 5292        | 5397 | 5503 | 5608 | 5713 | 5818      | 5924   | 6029 | 6134    | 6240 | 6 63.0 |
| 27   | 6345        | 6450 | 6555 | 6660 | 6766 | 6871      | 6976   | 7081 | 7186    | 7292 | 7 73.5 |
| 28   | 7397        | 7502 | 7607 | 7712 | 7818 | 7923      | 8028   | 8133 | 8238    | 8344 | 8 84.0 |
| 29   | 8449        | 8554 | 8659 | 8764 | 8870 | 8975      | 9080   | 9185 | 9290    | 9395 | 9 94.5 |
| 4130 | 615 9501    | 9606 | 9711 | 9816 | 9921 | 0026      | 0131   | 0237 | 0342    | 0447 |        |
| 31   | 616 0552    | 0657 | 0762 | 0867 | 0972 | 1078      | 1183   | 1288 | 1393    | 1498 |        |
| 32   | 1603        | 1708 | 1813 | 1918 | 2024 | 2129      | 2234   | 2339 | 2444    | 2549 |        |
| 33   | 2654        | 2759 | 2864 | 2969 | 3074 | 3179      | 3284   | 3390 | 3495    | 3600 |        |
| 34   | 3705        | 3810 | 3915 | 4020 | 4125 | 4230      | 4335   | 4440 | 4545    | 4650 |        |
| 35   | 4755        | 4860 | 4965 | 5070 | 5175 | 5280      | 5385   | 5490 | 5595    | 5700 |        |
| 36   | 5805        | 5910 | 6015 | 6120 | 6225 | 6330      | 6435   | 6540 | 6645    | 6750 |        |
| 37   | 6855        | 6960 | 7065 | 7170 | 7275 | 7380      | 7485   | 7590 | 7695    | 7800 | 1 10.1 |
| 38   | 7905        | 8010 | 8115 | 8220 | 8325 | 8430      | 8535   | 8640 | 8745    | 8850 | 2 20.8 |
| 39   | 8954        | 9059 | 9164 | 9269 | 9374 | 9479      | 9584   | 9689 | 9794    | 9899 | 3 31.3 |
| 4140 | 617 0003    | 0108 | 0213 | 0318 | 0423 | 0528      | 0633   | 0738 | 0843    | 0947 | 4 41.6 |
| 41   | 1052        | 1157 | 1262 | 1367 | 1472 | 1577      | 1682   | 1786 | 1891    | 1996 | 5 52.0 |
| 42   | 2101        | 2206 | 2311 | 2415 | 2520 | 2625      | 2730   | 2835 | 2940    | 3045 | 6 62.4 |
| 43   | 3149        | 3254 | 3359 | 3464 | 3569 | 3673      | 3778   | 3883 | 3988    | 4093 | 7 72.8 |
| 44   | 4197        | 4302 | 4407 | 4512 | 4617 | 4721      | 4826   | 4931 | 5036    | 5141 | 8 83.2 |
| 45   | 5245        | 5350 | 5455 | 5560 | 5664 | 5769      | 5874   | 5979 | 6083    | 6188 | 9 93.6 |
| 46   | 6293        | 6398 | 6502 | 6607 | 6712 | 6817      | 6921   | 7026 | 7131    | 7236 |        |
| 47   | 7340        | 7445 | 7550 | 7655 | 7759 | 7864      | 7969   | 8073 | 8178    | 8283 |        |
| 48   | 8387        | 8492 | 8597 | 8702 | 8806 | 8911      | 9016   | 9120 | 9225    | 9330 |        |
| 49   | 9434        | 9539 | 9644 | 9748 | 9853 | 9958      | 0062   | 0167 | 0272    | 0376 |        |
| 4150 | 618 0481    | 0586 | 0690 | 0795 | 0900 | 1004      | 1109   | 1213 | 1318    | 1423 |        |
| N.   | 0           | 1    | 2    | 3    | 4    | 5         | 6      | 7    | 8       | 9    | P. P.  |
| 4100 | 11° 23' 20" |      |      |      | 4100 | 1° 8' 20" | 8.4685 | 5463 | T. 6321 |      |        |
| 4110 | 11 25 0     |      |      |      | 4110 | 1 8 30    |        | 5461 | 6323    |      |        |
| 4120 | 11 26 40    |      |      |      | 4120 | 1 8 40    |        | 5460 | 6326    |      |        |
| 4130 | 11 28 20    |      |      |      | 4130 | 1 8 50    |        | 5458 | 6329    |      |        |
| 4140 | 11 30 0     |      |      |      | 4140 | 1 9 0     |        | 5457 | 6332    |      |        |



| N.    | 0             | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | P. P.                                    |
|-------|---------------|------|------|------|------|------|------|------|------|------|--|
| 4150  | 6180481       | 0586 | 0690 | 0795 | 0900 | 1004 | 1109 | 1213 | 1318 | 1423 |  |
| 51    | 1527          | 1632 | 1737 | 1841 | 1946 | 2050 | 2155 | 2260 | 2364 | 2469 |  |
| 52    | 2573          | 2678 | 2783 | 2887 | 2992 | 3096 | 3201 | 3306 | 3410 | 3515 |  |
| 53    | 3619          | 3724 | 3828 | 3933 | 4038 | 4142 | 4247 | 4351 | 4456 | 4560 |  |
| 54    | 4665          | 4769 | 4874 | 4979 | 5083 | 5188 | 5292 | 5397 | 5501 | 5606 |  |
| 55    | 5710          | 5815 | 5919 | 6024 | 6128 | 6233 | 6337 | 6442 | 6546 | 6651 |  |
| 56    | 6755          | 6860 | 6964 | 7069 | 7173 | 7278 | 7382 | 7487 | 7591 | 7696 | 105                                      |
| 57    | 7800          | 7905 | 8009 | 8114 | 8218 | 8323 | 8427 | 8531 | 8636 | 8740 | 1 10.5                                   |
| 58    | 8845          | 8949 | 9054 | 9158 | 9263 | 9367 | 9471 | 9576 | 9680 | 9785 | 2 21.0                                   |
| 59    | 9889          | 9994 | 0098 | 0202 | 0307 | 0411 | 0516 | 0620 | 0725 | 0829 | 3 31.5                                   |
| 4160  | 6190933       | 1038 | 1142 | 1246 | 1351 | 1455 | 1560 | 1664 | 1768 | 1873 | 4 42.0                                   |
| 61    | 1977          | 2082 | 2186 | 2290 | 2395 | 2499 | 2603 | 2708 | 2812 | 2916 | 5 52.5                                   |
| 62    | 3021          | 3125 | 3229 | 3334 | 3438 | 3542 | 3647 | 3751 | 3855 | 3960 | 6 63.0                                   |
| 63    | 4064          | 4168 | 4273 | 4377 | 4481 | 4586 | 4690 | 4794 | 4899 | 5003 | 7 73.5                                   |
| 64    | 5107          | 5212 | 5316 | 5420 | 5524 | 5629 | 5733 | 5837 | 5942 | 6046 | 8 84.0                                   |
| 65    | 6150          | 6254 | 6359 | 6463 | 6567 | 6671 | 6776 | 6880 | 6984 | 7088 | 9 94.5                                   |
| 66    | 7193          | 7297 | 7401 | 7505 | 7610 | 7714 | 7818 | 7922 | 8027 | 8131 |  |
| 67    | 8235          | 8339 | 8443 | 8548 | 8652 | 8756 | 8860 | 8964 | 9069 | 9173 |  |
| 68    | 9277          | 9381 | 9485 | 9590 | 9694 | 9798 | 9902 | 0006 | 0111 | 0215 |  |
| 69    | 6200319       | 0423 | 0527 | 0631 | 0736 | 0840 | 0944 | 1048 | 1152 | 1256 |  |
| 4170  | 6201361       | 1465 | 1569 | 1673 | 1777 | 1881 | 1985 | 2090 | 2194 | 2298 |  |
| 71    | 2402          | 2506 | 2610 | 2714 | 2818 | 2922 | 3027 | 3131 | 3235 | 3339 | 104                                      |
| 72    | 3443          | 3547 | 3651 | 3755 | 3859 | 3963 | 4068 | 4172 | 4276 | 4380 | 1 10.4                                   |
| 73    | 4484          | 4588 | 4692 | 4796 | 4900 | 5004 | 5108 | 5212 | 5316 | 5420 | 2 20.8                                   |
| 74    | 5524          | 5628 | 5733 | 5837 | 5941 | 6045 | 6149 | 6253 | 6357 | 6461 | 3 31.2                                   |
| 75    | 6565          | 6669 | 6773 | 6877 | 6981 | 7085 | 7189 | 7293 | 7397 | 7501 | 4 41.6                                   |
| 76    | 7605          | 7709 | 7813 | 7917 | 8021 | 8125 | 8229 | 8333 | 8437 | 8541 | 5 52.0                                   |
| 77    | 8645          | 8749 | 8853 | 8957 | 9061 | 9165 | 9269 | 9373 | 9476 | 9580 | 6 62.4                                   |
| 78    | 9684          | 9788 | 9892 | 9996 | 0100 | 0204 | 0308 | 0412 | 0516 | 0620 | 7 72.8                                   |
| 79    | 6210724       | 0828 | 0932 | 1035 | 1139 | 1243 | 1347 | 1451 | 1555 | 1659 | 8 83.2                                   |
| 4180  | 6211763       | 1867 | 1971 | 2075 | 2178 | 2282 | 2386 | 2490 | 2594 | 2698 | 9 93.6                                   |
| 81    | 2802          | 2906 | 3009 | 3113 | 3217 | 3321 | 3425 | 3529 | 3633 | 3736 |  |
| 82    | 3840          | 3944 | 4048 | 4152 | 4256 | 4359 | 4463 | 4567 | 4671 | 4775 |  |
| 83    | 4879          | 4982 | 5086 | 5190 | 5294 | 5398 | 5502 | 5605 | 5709 | 5813 |  |
| 84    | 5917          | 6021 | 6124 | 6228 | 6332 | 6436 | 6540 | 6643 | 6747 | 6851 |  |
| 85    | 6955          | 7058 | 7162 | 7266 | 7370 | 7473 | 7577 | 7681 | 7785 | 7888 |  |
| 86    | 7992          | 8096 | 8200 | 8303 | 8407 | 8511 | 8615 | 8718 | 8822 | 8926 | 103                                      |
| 87    | 9030          | 9133 | 9237 | 9341 | 9444 | 9548 | 9652 | 9756 | 9859 | 9963 | 1 10.3                                   |
| 88    | 6210067       | 0170 | 0274 | 0378 | 0482 | 0585 | 0689 | 0793 | 0896 | 1000 | 2 20.6                                   |
| 89    | 1104          | 1207 | 1311 | 1415 | 1518 | 1622 | 1726 | 1829 | 1933 | 2037 | 3 30.9                                   |
| 4190  | 6222140       | 2244 | 2348 | 2451 | 2555 | 2658 | 2762 | 2866 | 2969 | 3073 | 4 41.2                                   |
| 91    | 3177          | 3280 | 3384 | 3487 | 3591 | 3695 | 3798 | 3902 | 4006 | 4109 | 5 51.5                                   |
| 92    | 4213          | 4316 | 4420 | 4524 | 4627 | 4731 | 4834 | 4938 | 5041 | 5145 | 6 61.8                                   |
| 93    | 5249          | 5352 | 5456 | 5559 | 5663 | 5766 | 5870 | 5974 | 6077 | 6181 | 7 72.1                                   |
| 94    | 6284          | 6388 | 6491 | 6595 | 6698 | 6802 | 6906 | 7009 | 7113 | 7216 | 8 82.4                                   |
| 95    | 7320          | 7423 | 7527 | 7630 | 7734 | 7837 | 7941 | 8044 | 8148 | 8251 | 9 92.7                                   |
| 96    | 8355          | 8458 | 8562 | 8665 | 8769 | 8872 | 8976 | 9079 | 9183 | 9286 |  |
| 97    | 9390          | 9493 | 9597 | 9700 | 9804 | 9907 | 0011 | 0114 | 0217 | 0321 |  |
| 98    | 6230424       | 0528 | 0631 | 0735 | 0838 | 0942 | 1045 | 1148 | 1252 | 1355 |  |
| 99    | 1459          | 1562 | 1666 | 1769 | 1872 | 1976 | 2079 | 2183 | 2286 | 2389 |  |
| 4200  | 6232493       | 2596 | 2700 | 2803 | 2906 | 3010 | 3113 | 3217 | 3320 | 3423 |  |
| N.    | 0             | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | P. P.                                    |
| 41500 | = 11° 31' 40" |      |      |      |      |      |      |      |      |      | 41500' = 1° 9' 10" S. 4.685 5456 T. 6335 |
| 41600 | = 11° 33' 20" |      |      |      |      |      |      |      |      |      | 41600' = 1° 9' 20" 5454 6338             |
| 41700 | = 11° 35' 0"  |      |      |      |      |      |      |      |      |      | 41700' = 1° 9' 30" 5453 6340             |
| 41800 | = 11° 36' 40" |      |      |      |      |      |      |      |      |      | 41800' = 1° 9' 40" 5451 6343             |
| 41900 | = 11° 38' 20" |      |      |      |      |      |      |      |      |      | 41900' = 1° 9' 50" 5450 6346             |



| N.    | 0          | 1    | 2    | 3    | 4    | 5     | 6         | 7        | 8    | 9       | P. P.  |
|-------|------------|------|------|------|------|-------|-----------|----------|------|---------|--------|
| 4200  | 623 2493   | 2596 | 2700 | 2803 | 2906 | 3010  | 3113      | 3217     | 3320 | 3423    |        |
| 01    | 3527       | 3630 | 3734 | 3837 | 3940 | 4044  | 4147      | 4250     | 4354 | 4457    |        |
| 02    | 4560       | 4664 | 4767 | 4871 | 4974 | 5077  | 5181      | 5284     | 5387 | 5491    |        |
| 03    | 5594       | 5697 | 5801 | 5904 | 6007 | 6111  | 6214      | 6317     | 6420 | 6524    |        |
| 04    | 6627       | 6730 | 6834 | 6937 | 7040 | 7144  | 7247      | 7350     | 7454 | 7557    |        |
| 05    | 7660       | 7763 | 7867 | 7970 | 8073 | 8176  | 8280      | 8383     | 8486 | 8589    |        |
| 06    | 8693       | 8796 | 8899 | 9002 | 9106 | 9209  | 9312      | 9415     | 9519 | 9622    |        |
| 07    | 9725       | 9828 | 9932 | 0035 | 0138 | 0241  | 0344      | 0448     | 0551 | 0654    | 101    |
| 08    | 624 0757   | 0861 | 0964 | 1067 | 1170 | 1273  | 1377      | 1480     | 1583 | 1686    | 2 10.3 |
| 09    | 1789       | 1892 | 1996 | 2099 | 2202 | 2305  | 2408      | 2511     | 2615 | 2718    | 3 11.2 |
| 4210  | 624 2821   | 2924 | 3027 | 3130 | 3234 | 3337  | 3440      | 3543     | 3646 | 3749    | 4 11.6 |
| 11    | 3852       | 3956 | 4059 | 4162 | 4265 | 4368  | 4471      | 4574     | 4677 | 4781    | 5 12.0 |
| 12    | 4884       | 4987 | 5090 | 5193 | 5296 | 5399  | 5502      | 5605     | 5708 | 5811    | 6 12.4 |
| 13    | 5915       | 6018 | 6121 | 6224 | 6327 | 6430  | 6533      | 6636     | 6739 | 6842    | 7 12.8 |
| 14    | 6945       | 7048 | 7151 | 7254 | 7358 | 7461  | 7564      | 7667     | 7770 | 7873    | 8 13.2 |
| 15    | 7976       | 8079 | 8182 | 8285 | 8388 | 8491  | 8594      | 8697     | 8800 | 8903    | 9 13.6 |
| 16    | 9006       | 9109 | 9212 | 9315 | 9418 | 9521  | 9624      | 9727     | 9830 | 9933    |        |
| 17    | 625 0036   | 0139 | 0242 | 0345 | 0448 | 0551  | 0654      | 0757     | 0860 | 0963    |        |
| 18    | 1066       | 1169 | 1272 | 1375 | 1478 | 1581  | 1684      | 1787     | 1890 | 1993    |        |
| 19    | 2095       | 2198 | 2301 | 2404 | 2507 | 2610  | 2713      | 2816     | 2919 | 3022    |        |
| 4220  | 625 3125   | 3227 | 3330 | 3433 | 3536 | 3639  | 3742      | 3845     | 3948 | 4051    |        |
| 21    | 4154       | 4256 | 4359 | 4462 | 4565 | 4668  | 4771      | 4874     | 4977 | 5079    | 103    |
| 22    | 5182       | 5285 | 5388 | 5491 | 5594 | 5697  | 5799      | 5902     | 6005 | 6108    | 1 10.3 |
| 23    | 6211       | 6314 | 6416 | 6519 | 6622 | 6725  | 6828      | 6931     | 7033 | 7136    | 2 20.6 |
| 24    | 7239       | 7342 | 7445 | 7548 | 7650 | 7753  | 7856      | 7959     | 8062 | 8164    | 3 30.9 |
| 25    | 8267       | 8370 | 8473 | 8575 | 8678 | 8781  | 8884      | 8987     | 9089 | 9192    | 4 40.2 |
| 26    | 9295       | 9398 | 9500 | 9603 | 9706 | 9809  | 9911      | 0014     | 0117 | 0220    | 5 50.5 |
| 27    | 626 0322   | 0425 | 0528 | 0631 | 0733 | 0836  | 0939      | 1042     | 1144 | 1247    | 6 60.8 |
| 28    | 1350       | 1453 | 1555 | 1658 | 1761 | 1864  | 1966      | 2069     | 2171 | 2274    | 7 70.1 |
| 29    | 2377       | 2480 | 2582 | 2685 | 2788 | 2890  | 2993      | 3096     | 3198 | 3301    | 8 80.4 |
| 4230  | 626 3404   | 3506 | 3609 | 3712 | 3814 | 3917  | 4020      | 4122     | 4225 | 4328    | 9 90.7 |
| 31    | 4430       | 4533 | 4636 | 4738 | 4841 | 4943  | 5046      | 5149     | 5251 | 5354    |        |
| 32    | 5457       | 5559 | 5662 | 5764 | 5867 | 5970  | 6072      | 6175     | 6277 | 6380    |        |
| 33    | 6483       | 6585 | 6688 | 6790 | 6893 | 6996  | 7098      | 7201     | 7303 | 7406    |        |
| 34    | 7509       | 7611 | 7714 | 7816 | 7919 | 8021  | 8124      | 8226     | 8329 | 8432    |        |
| 35    | 8534       | 8637 | 8739 | 8842 | 8944 | 9047  | 9149      | 9252     | 9354 | 9457    |        |
| 36    | 9560       | 9662 | 9765 | 9867 | 9970 | 0072  | 0175      | 0277     | 0380 | 0482    |        |
| 37    | 627 0585   | 0687 | 0790 | 0892 | 0995 | 1097  | 1200      | 1302     | 1405 | 1507    | 103    |
| 38    | 1610       | 1712 | 1814 | 1917 | 2019 | 2122  | 2224      | 2327     | 2429 | 2532    | 1 10.3 |
| 39    | 2634       | 2737 | 2839 | 2942 | 3044 | 3146  | 3249      | 3351     | 3454 | 3556    | 2 20.4 |
| 4240  | 627 3659   | 3761 | 3863 | 3966 | 4068 | 4171  | 4273      | 4376     | 4478 | 4580    | 3 30.6 |
| 41    | 4683       | 4785 | 4888 | 4990 | 5092 | 5195  | 5297      | 5399     | 5502 | 5604    | 4 40.8 |
| 42    | 5707       | 5809 | 5911 | 6014 | 6116 | 6219  | 6321      | 6423     | 6526 | 6628    | 5 50.0 |
| 43    | 6730       | 6833 | 6935 | 7037 | 7140 | 7242  | 7344      | 7447     | 7549 | 7651    | 6 60.2 |
| 44    | 7754       | 7856 | 7958 | 8061 | 8163 | 8265  | 8368      | 8470     | 8572 | 8675    | 7 70.4 |
| 45    | 8777       | 8879 | 8982 | 9084 | 9186 | 9288  | 9391      | 9493     | 9595 | 9698    | 8 80.6 |
| 46    | 9800       | 9902 | 0004 | 0107 | 0209 | 0311  | 0414      | 0516     | 0618 | 0720    | 9 90.8 |
| 47    | 628 0823   | 0925 | 1027 | 1129 | 1232 | 1334  | 1436      | 1538     | 1641 | 1743    |        |
| 48    | 1845       | 1947 | 2050 | 2152 | 2254 | 2356  | 2458      | 2561     | 2663 | 2765    |        |
| 49    | 2867       | 2970 | 3072 | 3174 | 3276 | 3378  | 3481      | 3583     | 3685 | 3787    |        |
| 4250  | 628 3889   | 3991 | 4094 | 4196 | 4298 | 4400  | 4502      | 4605     | 4707 | 4809    |        |
| N.    | 0          | 1    | 2    | 3    | 4    | 5     | 6         | 7        | 8    | 9       | P. P.  |
| 4200' | 11° 40' 0" |      |      |      |      | 4200' | 1° 10' 0" | S. 4.685 | 5449 | T. 6349 |        |
| 42100 | 11 41 40   |      |      |      |      | 4210  | 1 10 10   |          | 5447 | 6352    |        |
| 42200 | 11 43 20   |      |      |      |      | 4220  | 1 10 20   |          | 5446 | 6355    |        |
| 42300 | 11 45 0    |      |      |      |      | 4230  | 1 10 30   |          | 5444 | 6358    |        |
| 42400 | 11 46 40   |      |      |      |      | 4240  | 1 10 40   |          | 5443 | 6360    |        |



| N.    | 0             | 1    | 2    | 3    | 4     | 5            | 6    | 7    | 8    | 9        | P. P.        |
|-------|---------------|------|------|------|-------|--------------|------|------|------|----------|--------------|
| 4250  | 628 3889      | 3991 | 4094 | 4196 | 4298  | 4400         | 4502 | 4605 | 4707 | 4809     |              |
| 51    | 4911          | 5013 | 5115 | 5218 | 5320  | 5422         | 5524 | 5626 | 5728 | 5830     |              |
| 52    | 5933          | 6035 | 6137 | 6239 | 6341  | 6443         | 6545 | 6647 | 6750 | 6852     |              |
| 53    | 6954          | 7056 | 7158 | 7260 | 7362  | 7464         | 7566 | 7669 | 7771 | 7873     |              |
| 54    | 7975          | 8077 | 8179 | 8281 | 8383  | 8485         | 8587 | 8689 | 8792 | 8894     |              |
| 55    | 8996          | 9098 | 9200 | 9302 | 9404  | 9506         | 9608 | 9710 | 9812 | 9914     |              |
| 56    | 629 0016      | 0118 | 0220 | 0322 | 0424  | 0526         | 0628 | 0730 | 0832 | 0934     |              |
| 57    | 1037          | 1139 | 1241 | 1343 | 1445  | 1547         | 1649 | 1751 | 1853 | 1955     | 103          |
| 58    | 2057          | 2159 | 2261 | 2363 | 2465  | 2567         | 2668 | 2770 | 2872 | 2974     | 10.3         |
| 59    | 3076          | 3178 | 3280 | 3382 | 3484  | 3586         | 3688 | 3790 | 3892 | 3994     | 20.6         |
| 4260  | 629 4096      | 4198 | 4300 | 4402 | 4504  | 4606         | 4708 | 4810 | 4911 | 5013     | 30.9         |
| 61    | 5115          | 5217 | 5319 | 5421 | 5523  | 5625         | 5727 | 5829 | 5931 | 6033     | 41.2         |
| 62    | 6134          | 6236 | 6338 | 6440 | 6542  | 6644         | 6746 | 6848 | 6950 | 7051     | 51.5         |
| 63    | 7153          | 7255 | 7357 | 7459 | 7561  | 7663         | 7765 | 7866 | 7968 | 8070     | 61.8         |
| 64    | 8172          | 8274 | 8376 | 8478 | 8579  | 8681         | 8783 | 8885 | 8987 | 9089     | 72.1         |
| 65    | 9190          | 9292 | 9394 | 9496 | 9598  | 9699         | 9801 | 9903 | 0005 | 0107     | 82.4         |
| 66    | 630 0209      | 0310 | 0412 | 0514 | 0616  | 0717         | 0819 | 0921 | 1023 | 1125     | 92.7         |
| 67    | 1226          | 1328 | 1430 | 1532 | 1634  | 1735         | 1837 | 1939 | 2041 | 2142     |              |
| 68    | 2244          | 2346 | 2448 | 2549 | 2651  | 2753         | 2855 | 2956 | 3058 | 3160     |              |
| 69    | 3262          | 3363 | 3465 | 3567 | 3668  | 3770         | 3872 | 3974 | 4075 | 4177     |              |
| 4270  | 630 4279      | 4380 | 4482 | 4584 | 4686  | 4787         | 4889 | 4991 | 5092 | 5194     |              |
| 71    | 5296          | 5397 | 5499 | 5601 | 5702  | 5804         | 5906 | 6007 | 6109 | 6211     | 102          |
| 72    | 6312          | 6414 | 6516 | 6617 | 6719  | 6821         | 6922 | 7024 | 7126 | 7227     | 10.2         |
| 73    | 7329          | 7431 | 7532 | 7634 | 7735  | 7837         | 7939 | 8040 | 8142 | 8244     | 20.4         |
| 74    | 8345          | 8447 | 8548 | 8650 | 8752  | 8853         | 8955 | 9056 | 9158 | 9260     | 30.6         |
| 75    | 9361          | 9463 | 9564 | 9666 | 9768  | 9869         | 9971 | 0072 | 0174 | 0275     | 40.8         |
| 76    | 631 0377      | 0479 | 0580 | 0682 | 0783  | 0885         | 0986 | 1088 | 1189 | 1291     | 51.0         |
| 77    | 1393          | 1494 | 1596 | 1697 | 1799  | 1900         | 2002 | 2103 | 2205 | 2306     | 61.2         |
| 78    | 2408          | 2509 | 2611 | 2712 | 2814  | 2915         | 3017 | 3118 | 3220 | 3321     | 71.4         |
| 79    | 3423          | 3524 | 3626 | 3727 | 3829  | 3930         | 4032 | 4133 | 4235 | 4336     | 81.6         |
| 4280  | 631 4438      | 4539 | 4641 | 4742 | 4844  | 4945         | 5046 | 5148 | 5249 | 5351     | 91.8         |
| 81    | 5452          | 5554 | 5655 | 5757 | 5858  | 5959         | 6061 | 6162 | 6264 | 6365     |              |
| 82    | 6467          | 6568 | 6669 | 6771 | 6872  | 6974         | 7075 | 7177 | 7278 | 7379     |              |
| 83    | 7481          | 7582 | 7684 | 7785 | 7886  | 7988         | 8089 | 8190 | 8292 | 8393     |              |
| 84    | 8495          | 8596 | 8697 | 8799 | 8900  | 9001         | 9103 | 9204 | 9306 | 9407     |              |
| 85    | 9508          | 9609 | 9711 | 9812 | 9914  | 0015         | 0116 | 0218 | 0319 | 0420     |              |
| 86    | 632 0522      | 0623 | 0724 | 0826 | 0927  | 1028         | 1130 | 1231 | 1332 | 1434     |              |
| 87    | 1535          | 1636 | 1737 | 1839 | 1940  | 2041         | 2143 | 2244 | 2345 | 2446     | 101          |
| 88    | 2548          | 2649 | 2750 | 2852 | 2953  | 3054         | 3155 | 3257 | 3358 | 3459     | 10.1         |
| 89    | 3560          | 3662 | 3763 | 3864 | 3965  | 4067         | 4168 | 4269 | 4370 | 4472     | 20.2         |
| 4290  | 632 4573      | 4674 | 4775 | 4877 | 4978  | 5079         | 5180 | 5282 | 5383 | 5484     | 30.3         |
| 91    | 5585          | 5686 | 5788 | 5889 | 5990  | 6091         | 6192 | 6294 | 6395 | 6496     | 40.4         |
| 92    | 6597          | 6698 | 6800 | 6901 | 7002  | 7103         | 7204 | 7305 | 7407 | 7508     | 50.5         |
| 93    | 7609          | 7710 | 7811 | 7912 | 8014  | 8115         | 8216 | 8317 | 8418 | 8519     | 60.6         |
| 94    | 8620          | 8722 | 8823 | 8924 | 9025  | 9126         | 9227 | 9328 | 9429 | 9531     | 70.7         |
| 95    | 9632          | 9733 | 9834 | 9935 | 0036  | 0137         | 0238 | 0339 | 0441 | 0542     | 80.8         |
| 96    | 633 0643      | 0744 | 0845 | 0946 | 1047  | 1148         | 1249 | 1350 | 1451 | 1552     | 90.9         |
| 97    | 1654          | 1755 | 1856 | 1957 | 2058  | 2159         | 2260 | 2361 | 2462 | 2563     |              |
| 98    | 2664          | 2765 | 2866 | 2967 | 3068  | 3169         | 3270 | 3371 | 3472 | 3573     |              |
| 99    | 3674          | 3775 | 3876 | 3978 | 4079  | 4180         | 4281 | 4382 | 4483 | 4584     |              |
| 4300  | 633 4685      | 4786 | 4887 | 4988 | 5089  | 5190         | 5291 | 5391 | 5492 | 5593     |              |
| N.    | 0             | 1    | 2    | 3    | 4     | 5            | 6    | 7    | 8    | 9        | P. P.        |
| 4250' | = 11° 48' 20" |      |      |      | 4250' | = 1° 10' 50" |      |      |      | S. 4.685 | 5441 T. 6363 |
| 42600 | = 11 50 0     |      |      |      | 42600 | = 1 11 0     |      |      |      | 5440     | 6366         |
| 42700 | = 11 51 40    |      |      |      | 42700 | = 1 11 10    |      |      |      | 5438     | 6369         |
| 42800 | = 11 53 20    |      |      |      | 42800 | = 1 11 20    |      |      |      | 5437     | 6372         |
| 42900 | = 11 55 0     |      |      |      | 42900 | = 1 11 30    |      |      |      | 5436     | 6375         |







| N.    | 0           | 1    | 2    | 3    | 4     | 5           | 6        | 7    | 8       | 9    | P. P.  |
|-------|-------------|------|------|------|-------|-------------|----------|------|---------|------|--------|
| 4350  | 638 4893    | 4992 | 5092 | 5192 | 5292  | 5392        | 5492     | 5591 | 5691    | 5791 |        |
| 51    | 5801        | 5991 | 6090 | 6190 | 6290  | 6390        | 6490     | 6589 | 6689    | 6789 |        |
| 52    | 6889        | 6989 | 7088 | 7188 | 7288  | 7388        | 7488     | 7587 | 7687    | 7787 |        |
| 53    | 7887        | 7986 | 8086 | 8186 | 8286  | 8385        | 8485     | 8585 | 8685    | 8784 |        |
| 54    | 8884        | 8984 | 9084 | 9183 | 9283  | 9383        | 9483     | 9582 | 9682    | 9782 |        |
| 55    | 9882        | 9981 | 0081 | 0181 | 0280  | 0380        | 0480     | 0580 | 0679    | 0779 |        |
| 56    | 639 0879    | 0978 | 1078 | 1178 | 1277  | 1377        | 1477     | 1577 | 1676    | 1776 |        |
| 57    | 1876        | 1975 | 2075 | 2175 | 2274  | 2374        | 2474     | 2573 | 2673    | 2773 | 1 100  |
| 58    | 2872        | 2972 | 3072 | 3171 | 3271  | 3371        | 3470     | 3570 | 3669    | 3769 | 2 20.0 |
| 59    | 3869        | 3968 | 4068 | 4168 | 4267  | 4367        | 4466     | 4566 | 4666    | 4765 | 3 30.0 |
| 4360  | 639 4865    | 4965 | 5064 | 5164 | 5263  | 5363        | 5463     | 5562 | 5662    | 5761 | 4 40.0 |
| 61    | 5861        | 5960 | 6060 | 6160 | 6259  | 6359        | 6458     | 6558 | 6657    | 6757 | 5 50.0 |
| 62    | 6857        | 6956 | 7056 | 7155 | 7255  | 7354        | 7454     | 7553 | 7653    | 7753 | 6 60.0 |
| 63    | 7852        | 7952 | 8051 | 8151 | 8250  | 8350        | 8449     | 8549 | 8648    | 8748 | 7 70.0 |
| 64    | 8847        | 8947 | 9046 | 9146 | 9245  | 9345        | 9444     | 9544 | 9643    | 9743 | 8 80.0 |
| 65    | 9842        | 9942 | 0041 | 0141 | 0240  | 0340        | 0439     | 0539 | 0638    | 0738 | 9 90.0 |
| 66    | 640 0837    | 0937 | 1036 | 1136 | 1235  | 1335        | 1434     | 1534 | 1633    | 1732 |        |
| 67    | 1832        | 1931 | 2031 | 2130 | 2230  | 2329        | 2429     | 2528 | 2627    | 2727 |        |
| 68    | 2826        | 2926 | 3025 | 3125 | 3224  | 3324        | 3423     | 3522 | 3622    | 3721 |        |
| 69    | 3820        | 3920 | 4019 | 4119 | 4218  | 4317        | 4417     | 4516 | 4616    | 4715 |        |
| 4370  | 640 4814    | 4914 | 5013 | 5113 | 5212  | 5311        | 5411     | 5510 | 5609    | 5709 |        |
| 71    | 5808        | 5907 | 6007 | 6106 | 6205  | 6305        | 6404     | 6504 | 6603    | 6702 | 1 00   |
| 72    | 6802        | 6901 | 7000 | 7100 | 7199  | 7298        | 7398     | 7497 | 7596    | 7695 | 2 9.0  |
| 73    | 7795        | 7894 | 7993 | 8093 | 8192  | 8291        | 8391     | 8490 | 8589    | 8688 | 3 19.8 |
| 74    | 8788        | 8887 | 8986 | 9086 | 9185  | 9284        | 9383     | 9483 | 9582    | 9681 | 4 29.7 |
| 75    | 9781        | 9880 | 9979 | 0078 | 0178  | 0277        | 0376     | 0475 | 0575    | 0674 | 5 49.5 |
| 76    | 641 0773    | 0872 | 0972 | 1071 | 1170  | 1269        | 1369     | 1468 | 1567    | 1666 | 6 59.4 |
| 77    | 1765        | 1865 | 1964 | 2063 | 2162  | 2262        | 2361     | 2460 | 2559    | 2658 | 7 69.3 |
| 78    | 2758        | 2857 | 2956 | 3055 | 3154  | 3254        | 3353     | 3452 | 3551    | 3650 | 8 79.2 |
| 79    | 3749        | 3849 | 3948 | 4047 | 4146  | 4245        | 4344     | 4444 | 4543    | 4642 | 9 89.1 |
| 4380  | 641 4741    | 4840 | 4939 | 5039 | 5138  | 5237        | 5336     | 5435 | 5534    | 5633 |        |
| 81    | 5733        | 5832 | 5931 | 6030 | 6129  | 6228        | 6327     | 6426 | 6526    | 6625 |        |
| 82    | 6724        | 6823 | 6922 | 7021 | 7120  | 7219        | 7318     | 7417 | 7517    | 7616 |        |
| 83    | 7715        | 7814 | 7913 | 8012 | 8111  | 8210        | 8309     | 8408 | 8507    | 8606 |        |
| 84    | 8705        | 8805 | 8904 | 9003 | 9102  | 9201        | 9300     | 9399 | 9498    | 9597 |        |
| 85    | 9696        | 9795 | 9894 | 9993 | 0092  | 0191        | 0290     | 0389 | 0488    | 0587 |        |
| 86    | 642 0686    | 0785 | 0884 | 0983 | 1082  | 1181        | 1280     | 1379 | 1478    | 1577 | 1 08   |
| 87    | 1676        | 1775 | 1874 | 1973 | 2072  | 2171        | 2270     | 2369 | 2468    | 2567 | 2 19.6 |
| 88    | 2666        | 2765 | 2864 | 2963 | 3062  | 3161        | 3260     | 3359 | 3458    | 3557 | 3 29.4 |
| 89    | 3656        | 3755 | 3854 | 3953 | 4052  | 4151        | 4249     | 4348 | 4447    | 4546 | 4 39.2 |
| 4390  | 642 4645    | 4744 | 4843 | 4942 | 5041  | 5140        | 5239     | 5338 | 5437    | 5535 | 5 49.0 |
| 91    | 5644        | 5743 | 5842 | 5941 | 6040  | 6139        | 6238     | 6337 | 6436    | 6534 | 6 58.8 |
| 92    | 6643        | 6742 | 6841 | 6940 | 7039  | 7138        | 7237     | 7335 | 7434    | 7533 | 7 68.6 |
| 93    | 7642        | 7741 | 7840 | 7939 | 8037  | 8136        | 8235     | 8334 | 8433    | 8532 | 8 78.4 |
| 94    | 8601        | 8700 | 8798 | 8897 | 8996  | 9095        | 9194     | 9292 | 9391    | 9490 | 9 88.2 |
| 95    | 9589        | 9688 | 9786 | 9885 | 9984  | 0083        | 0182     | 0280 | 0379    | 0478 |        |
| 96    | 643 0577    | 0676 | 0774 | 0873 | 0972  | 1071        | 1170     | 1268 | 1367    | 1466 |        |
| 97    | 1565        | 1663 | 1762 | 1861 | 1960  | 2058        | 2157     | 2256 | 2355    | 2454 |        |
| 98    | 2552        | 2651 | 2750 | 2848 | 2947  | 3046        | 3145     | 3243 | 3342    | 3441 |        |
| 99    | 3540        | 3638 | 3737 | 3836 | 3935  | 4033        | 4132     | 4231 | 4329    | 4428 |        |
| 4400  | 643 4527    | 4625 | 4724 | 4823 | 4922  | 5020        | 5119     | 5218 | 5316    | 5415 |        |
| N.    | 0           | 1    | 2    | 3    | 4     | 5           | 6        | 7    | 8       | 9    | P. P.  |
| 43500 | 12° 5' 0"   |      |      |      | 43500 | 12° 10' 0"  | S. 4.685 | 5427 | T. 6393 |      |        |
| 43600 | 12° 6' 40"  |      |      |      | 43600 | 12° 12' 40" |          | 5425 | 6396    |      |        |
| 43700 | 12° 8' 20"  |      |      |      | 43700 | 12° 15' 0"  |          | 5424 | 6399    |      |        |
| 43800 | 12° 10' 0"  |      |      |      | 43800 | 12° 17' 0"  |          | 5422 | 6402    |      |        |
| 43900 | 12° 11' 40" |      |      |      | 43900 | 12° 19' 0"  |          | 5421 | 6404    |      |        |



| N.    | 0           | 1    | 2    | 3    | 4     | 5           | 6       | 7    | 8    | 9    | P. P. |
|-------|-------------|------|------|------|-------|-------------|---------|------|------|------|-------|
| 4400  | 643 4527    | 4625 | 4724 | 4823 | 4922  | 5020        | 5119    | 5218 | 5316 | 5415 |       |
| 01    | 5514        | 5612 | 5711 | 5810 | 5908  | 6007        | 6106    | 6204 | 6303 | 6402 |       |
| 02    | 6500        | 6599 | 6698 | 6796 | 6895  | 6994        | 7092    | 7191 | 7289 | 7388 |       |
| 03    | 7487        | 7585 | 7684 | 7783 | 7881  | 7980        | 8079    | 8177 | 8276 | 8374 |       |
| 04    | 8473        | 8572 | 8670 | 8769 | 8868  | 8966        | 9065    | 9163 | 9262 | 9360 |       |
| 05    | 9459        | 9558 | 9656 | 9755 | 9854  | 9952        | 0051    | 0149 | 0248 | 0346 |       |
| 06    | 644 0145    | 0243 | 0342 | 0441 | 0539  | 0638        | 0736    | 0835 | 0933 | 1032 | 1130  |
| 07    | 1231        | 1329 | 1428 | 1526 | 1625  | 1723        | 1822    | 1920 | 2019 | 2117 | 2216  |
| 08    | 2316        | 2414 | 2513 | 2611 | 2710  | 2808        | 2907    | 3005 | 3104 | 3202 | 3301  |
| 09    | 3401        | 3499 | 3598 | 3696 | 3795  | 3893        | 3992    | 4090 | 4189 | 4287 | 4386  |
| 4410  | 644 4386    | 4484 | 4583 | 4681 | 4780  | 4878        | 4977    | 5075 | 5174 | 5272 | 5371  |
| 11    | 5371        | 5469 | 5567 | 5666 | 5764  | 5863        | 5961    | 6060 | 6158 | 6257 | 6355  |
| 12    | 6355        | 6453 | 6552 | 6650 | 6749  | 6847        | 6946    | 7044 | 7143 | 7241 | 7340  |
| 13    | 7339        | 7438 | 7536 | 7635 | 7733  | 7832        | 7931    | 8029 | 8128 | 8226 | 8325  |
| 14    | 8323        | 8422 | 8520 | 8618 | 8717  | 8815        | 8914    | 9012 | 9111 | 9209 | 9308  |
| 15    | 9307        | 9405 | 9504 | 9602 | 9701  | 9799        | 9897    | 9996 | 0094 | 0193 | 0291  |
| 16    | 645 0291    | 0389 | 0487 | 0586 | 0684  | 0783        | 0881    | 0979 | 1078 | 1176 |       |
| 17    | 1274        | 1372 | 1471 | 1569 | 1667  | 1766        | 1864    | 1963 | 2061 | 2160 | 2258  |
| 18    | 2257        | 2355 | 2454 | 2552 | 2650  | 2749        | 2847    | 2946 | 3044 | 3143 | 3241  |
| 19    | 3240        | 3338 | 3437 | 3535 | 3634  | 3732        | 3831    | 3929 | 4028 | 4126 | 4225  |
| 4420  | 645 4223    | 4321 | 4419 | 4517 | 4616  | 4714        | 4812    | 4911 | 5009 | 5107 | 5206  |
| 21    | 5205        | 5303 | 5402 | 5500 | 5598  | 5696        | 5795    | 5893 | 5991 | 6089 | 6188  |
| 22    | 6187        | 6286 | 6384 | 6482 | 6580  | 6678        | 6777    | 6875 | 6974 | 7072 | 7171  |
| 23    | 7169        | 7268 | 7366 | 7464 | 7562  | 7660        | 7758    | 7857 | 7955 | 8053 | 8152  |
| 24    | 8151        | 8249 | 8348 | 8446 | 8544  | 8642        | 8740    | 8838 | 8937 | 9035 | 9134  |
| 25    | 9133        | 9231 | 9329 | 9427 | 9525  | 9623        | 9721    | 9820 | 9918 | 0016 | 0115  |
| 26    | 646 0114    | 0212 | 0310 | 0408 | 0507  | 0605        | 0703    | 0801 | 0900 | 1000 | 1100  |
| 27    | 1099        | 1197 | 1295 | 1393 | 1491  | 1589        | 1687    | 1785 | 1884 | 1982 | 2080  |
| 28    | 2079        | 2177 | 2275 | 2373 | 2471  | 2569        | 2667    | 2765 | 2863 | 2961 | 3059  |
| 29    | 3057        | 3155 | 3253 | 3351 | 3449  | 3547        | 3645    | 3743 | 3841 | 3939 | 4037  |
| 4430  | 646 4037    | 4135 | 4233 | 4331 | 4429  | 4527        | 4625    | 4723 | 4821 | 4919 | 5017  |
| 31    | 5016        | 5114 | 5212 | 5310 | 5408  | 5506        | 5604    | 5702 | 5800 | 5900 | 6000  |
| 32    | 5998        | 6096 | 6194 | 6292 | 6390  | 6488        | 6586    | 6684 | 6782 | 6880 | 6978  |
| 33    | 6977        | 7075 | 7173 | 7271 | 7369  | 7467        | 7565    | 7663 | 7761 | 7859 | 7957  |
| 34    | 7956        | 8054 | 8152 | 8250 | 8348  | 8446        | 8544    | 8642 | 8740 | 8838 | 8936  |
| 35    | 8935        | 9033 | 9131 | 9229 | 9327  | 9425        | 9523    | 9621 | 9719 | 9817 | 9915  |
| 36    | 9914        | 0012 | 0110 | 0208 | 0306  | 0404        | 0502    | 0600 | 0700 | 0800 | 0900  |
| 37    | 647 0894    | 0992 | 1090 | 1188 | 1286  | 1384        | 1482    | 1579 | 1677 | 1775 | 1873  |
| 38    | 1872        | 1970 | 2068 | 2166 | 2264  | 2362        | 2460    | 2558 | 2656 | 2754 | 2852  |
| 39    | 2851        | 2949 | 3047 | 3145 | 3243  | 3341        | 3439    | 3537 | 3635 | 3733 | 3831  |
| 4440  | 647 3830    | 3928 | 4025 | 4123 | 4221  | 4319        | 4417    | 4515 | 4613 | 4711 | 4809  |
| 41    | 4808        | 4906 | 5004 | 5102 | 5200  | 5297        | 5395    | 5493 | 5591 | 5689 | 5787  |
| 42    | 5786        | 5884 | 5981 | 6079 | 6177  | 6274        | 6372    | 6470 | 6568 | 6666 | 6764  |
| 43    | 6763        | 6861 | 6959 | 7056 | 7154  | 7252        | 7350    | 7447 | 7545 | 7643 | 7741  |
| 44    | 7740        | 7838 | 7936 | 8034 | 8131  | 8229        | 8327    | 8425 | 8523 | 8621 | 8719  |
| 45    | 8718        | 8815 | 8913 | 9011 | 9108  | 9206        | 9304    | 9402 | 9500 | 9598 | 9696  |
| 46    | 9695        | 9792 | 9890 | 9988 | 0085  | 0183        | 0281    | 0379 | 0477 | 0575 | 0673  |
| 47    | 648 0671    | 0769 | 0867 | 0964 | 1062  | 1160        | 1257    | 1355 | 1453 | 1551 | 1649  |
| 48    | 1648        | 1745 | 1843 | 1941 | 2038  | 2136        | 2234    | 2331 | 2429 | 2527 | 2625  |
| 49    | 2624        | 2722 | 2819 | 2917 | 3015  | 3112        | 3210    | 3307 | 3405 | 3503 | 3601  |
| 4450  | 648 3600    | 3698 | 3795 | 3893 | 3990  | 4088        | 4186    | 4283 | 4381 | 4479 | 4577  |
| N.    | 0           | 1    | 2    | 3    | 4     | 5           | 6       | 7    | 8    | 9    | P. P. |
| 44000 | 12° 13' 20" |      |      |      | 44000 | 12° 13' 30" | 8.4 683 | 5419 | 5419 | 5419 | 5419  |
| 44100 | 12 15 0     |      |      |      | 44100 | 12 15 30    |         | 5418 | 5418 | 5418 | 5418  |
| 44200 | 12 16 40    |      |      |      | 44200 | 12 17 40    |         | 5416 | 5416 | 5416 | 5416  |
| 44300 | 12 18 20    |      |      |      | 44300 | 12 19 30    |         | 5415 | 5415 | 5415 | 5415  |
| 44400 | 12 20 0     |      |      |      | 44400 | 12 21 0     |         | 5413 | 5413 | 5413 | 5413  |



| N.   | 0        | 1    | 2    | 3    | 4    | 5        | 6        | 7    | 8       | 9    | P. P.  |
|------|----------|------|------|------|------|----------|----------|------|---------|------|--------|
| 4450 | 618 3600 | 3698 | 3795 | 3891 | 3990 | 4088     | 4186     | 4283 | 4381    | 4478 |        |
| 51   | 4576     | 4674 | 4771 | 4869 | 4966 | 5064     | 5161     | 5259 | 5356    | 5454 |        |
| 52   | 5552     | 5649 | 5747 | 5844 | 5942 | 6039     | 6137     | 6234 | 6332    | 6429 |        |
| 53   | 6527     | 6624 | 6722 | 6820 | 6917 | 7015     | 7112     | 7210 | 7307    | 7405 |        |
| 54   | 7502     | 7600 | 7697 | 7795 | 7892 | 7990     | 8087     | 8185 | 8282    | 8380 |        |
| 55   | 8477     | 8575 | 8672 | 8770 | 8867 | 8964     | 9062     | 9159 | 9257    | 9354 |        |
| 56   | 9452     | 9549 | 9647 | 9744 | 9842 | 9939     | 0037     | 0134 | 0231    | 0329 |        |
| 57   | 619 0426 | 0524 | 0621 | 0719 | 0816 | 0914     | 1011     | 1108 | 1206    | 1303 | 1 9.8  |
| 58   | 1401     | 1498 | 1595 | 1693 | 1790 | 1888     | 1985     | 2083 | 2180    | 2277 | 2 19.6 |
| 59   | 2375     | 2472 | 2570 | 2667 | 2764 | 2862     | 2959     | 3056 | 3154    | 3251 | 3 29.4 |
| 4460 | 619 1449 | 1446 | 1444 | 1441 | 1438 | 1435     | 1433     | 1430 | 1428    | 1425 | 4 39.2 |
| 61   | 4422     | 4420 | 4417 | 4415 | 4412 | 4410     | 4407     | 4405 | 4403    | 4401 | 5 49.0 |
| 62   | 5296     | 5294 | 5291 | 5289 | 5286 | 5284     | 5281     | 5279 | 5277    | 5275 | 6 58.8 |
| 63   | 6269     | 6266 | 6264 | 6261 | 6259 | 6256     | 6254     | 6251 | 6249    | 6247 | 7 68.6 |
| 64   | 7242     | 7239 | 7236 | 7234 | 7231 | 7228     | 7226     | 7223 | 7221    | 7219 | 8 78.4 |
| 65   | 8215     | 8212 | 8209 | 8207 | 8204 | 8201     | 8199     | 8196 | 8194    | 8192 | 9 88.2 |
| 66   | 9187     | 9184 | 9182 | 9179 | 9177 | 9174     | 9172     | 9169 | 9167    | 9165 |        |
| 67   | 619 0460 | 0457 | 0454 | 0452 | 0449 | 0447     | 0444     | 0442 | 0440    | 0437 |        |
| 68   | 1432     | 1429 | 1426 | 1424 | 1421 | 1419     | 1416     | 1414 | 1412    | 1410 |        |
| 69   | 2404     | 2401 | 2399 | 2396 | 2394 | 2391     | 2389     | 2386 | 2384    | 2382 |        |
| 4470 | 619 3075 | 3172 | 3270 | 3367 | 3464 | 3561     | 3658     | 3755 | 3852    | 3950 |        |
| 71   | 4047     | 4144 | 4241 | 4338 | 4435 | 4532     | 4629     | 4727 | 4824    | 4921 | 1 9.7  |
| 72   | 5019     | 5116 | 5213 | 5310 | 5407 | 5504     | 5601     | 5698 | 5795    | 5892 | 2 19.1 |
| 73   | 5989     | 6086 | 6183 | 6280 | 6377 | 6474     | 6571     | 6668 | 6766    | 6863 | 3 29.1 |
| 74   | 6960     | 7057 | 7154 | 7251 | 7348 | 7445     | 7542     | 7639 | 7736    | 7833 | 4 38.8 |
| 75   | 7930     | 8027 | 8124 | 8221 | 8318 | 8415     | 8512     | 8609 | 8707    | 8804 | 5 48.5 |
| 76   | 8901     | 8998 | 9095 | 9192 | 9289 | 9386     | 9483     | 9580 | 9677    | 9774 | 6 58.2 |
| 77   | 9874     | 9971 | 0068 | 0165 | 0262 | 0359     | 0456     | 0553 | 0650    | 0747 | 7 67.9 |
| 78   | 619 1041 | 0938 | 1035 | 1132 | 1229 | 1326     | 1423     | 1520 | 1617    | 1714 | 8 77.6 |
| 79   | 2611     | 2708 | 2805 | 2902 | 2999 | 3096     | 3193     | 3290 | 3387    | 3484 | 9 87.3 |
| 4480 | 619 2780 | 2877 | 2974 | 3071 | 3168 | 3265     | 3362     | 3459 | 3556    | 3653 |        |
| 81   | 4749     | 4846 | 4943 | 5040 | 5137 | 5234     | 5331     | 5428 | 5525    | 5622 |        |
| 82   | 5719     | 5816 | 5913 | 6010 | 6107 | 6204     | 6301     | 6398 | 6495    | 6592 |        |
| 83   | 5687     | 5784 | 5881 | 5978 | 6075 | 6172     | 6269     | 6366 | 6463    | 6560 |        |
| 84   | 6656     | 6753 | 6850 | 6947 | 7044 | 7141     | 7237     | 7334 | 7431    | 7528 |        |
| 85   | 7624     | 7721 | 7818 | 7915 | 8012 | 8109     | 8206     | 8303 | 8400    | 8496 |        |
| 86   | 8591     | 8688 | 8785 | 8882 | 8979 | 9076     | 9173     | 9270 | 9367    | 9464 |        |
| 87   | 9560     | 9657 | 9754 | 9851 | 9948 | 0045     | 0142     | 0238 | 0335    | 0432 | 1 9.6  |
| 88   | 619 0428 | 0525 | 0622 | 0719 | 0816 | 0913     | 1010     | 1107 | 1204    | 1301 | 2 19.3 |
| 89   | 1396     | 1493 | 1590 | 1687 | 1784 | 1881     | 1978     | 2075 | 2172    | 2269 | 3 28.8 |
| 4490 | 619 2464 | 2561 | 2657 | 2754 | 2851 | 2947     | 3044     | 3140 | 3237    | 3334 |        |
| 91   | 3431     | 3527 | 3624 | 3721 | 3817 | 3914     | 4011     | 4107 | 4204    | 4301 | 4 38.4 |
| 92   | 4397     | 4494 | 4591 | 4688 | 4784 | 4881     | 4978     | 5074 | 5171    | 5268 | 5 48.0 |
| 93   | 5364     | 5461 | 5558 | 5654 | 5751 | 5847     | 5944     | 6041 | 6137    | 6234 | 6 57.6 |
| 94   | 6331     | 6427 | 6524 | 6621 | 6717 | 6814     | 6910     | 7007 | 7104    | 7201 | 7 67.2 |
| 95   | 7297     | 7394 | 7491 | 7587 | 7684 | 7781     | 7877     | 7974 | 8070    | 8166 | 8 76.8 |
| 96   | 8264     | 8361 | 8456 | 8553 | 8649 | 8746     | 8843     | 8939 | 9036    | 9132 | 9 86.4 |
| 97   | 9229     | 9325 | 9422 | 9519 | 9615 | 9712     | 9808     | 9905 | 0001    | 0098 |        |
| 98   | 619 0495 | 0591 | 0688 | 0784 | 0881 | 0977     | 1074     | 1170 | 1267    | 1363 |        |
| 99   | 1401     | 1498 | 1595 | 1692 | 1789 | 1886     | 1983     | 2079 | 2176    | 2273 |        |
| 4500 | 619 2425 | 2522 | 2618 | 2715 | 2811 | 2908     | 3005     | 3101 | 3197    | 3294 |        |
| N.   | 0        | 1    | 2    | 3    | 4    | 5        | 6        | 7    | 8       |      |        |
| 4450 | 12 21 40 |      |      |      | 4455 | 12 14 10 | 8. 4.685 | 5412 | 7. 6423 |      |        |
| 4460 | 12 31 20 |      |      |      | 4465 | 12 14 20 |          | 5410 | 6426    |      |        |
| 4470 | 12 35 0  |      |      |      | 4475 | 12 14 30 |          | 5409 | 6429    |      |        |
| 4480 | 12 36 40 |      |      |      | 4485 | 12 14 40 |          | 5407 | 6432    |      |        |
| 4490 | 12 38 20 |      |      |      | 4495 | 12 14 50 |          | 5406 | 6435    |      |        |







| N.    | 0        | 1    | 2    | 3    | 4    | 5       | 6    | 7       | 8    | 9       | P. P.  |
|-------|----------|------|------|------|------|---------|------|---------|------|---------|--------|
| 550   | 658 0114 | 0209 | 0305 | 0400 | 0496 | 0591    | 0687 | 0782    | 0877 | 0973    |        |
| 51    | 1068     | 1164 | 1259 | 1355 | 1450 | 1545    | 1641 | 1736    | 1832 | 1927    |        |
| 52    | 2033     | 2138 | 2243 | 2349 | 2454 | 2559    | 2664 | 2769    | 2874 | 2979    |        |
| 53    | 3077     | 3182 | 3287 | 3392 | 3497 | 3602    | 3707 | 3812    | 3917 | 4022    |        |
| 54    | 3930     | 4035 | 4140 | 4245 | 4350 | 4455    | 4560 | 4665    | 4770 | 4875    |        |
| 55    | 4884     | 4979 | 5074 | 5170 | 5265 | 5361    | 5456 | 5551    | 5647 | 5742    |        |
| 56    | 5837     | 5932 | 6028 | 6123 | 6218 | 6314    | 6409 | 6504    | 6600 | 6695    |        |
| 57    | 6790     | 6886 | 6981 | 7076 | 7171 | 7267    | 7362 | 7457    | 7551 | 7648    | 1 96   |
| 58    | 7743     | 7838 | 7934 | 8029 | 8124 | 8220    | 8315 | 8410    | 8505 | 8601    | 2 9.6  |
| 59    | 8696     | 8791 | 8886 | 8981 | 9077 | 9172    | 9267 | 9363    | 9458 | 9553    | 3 28.8 |
| 1560  | 658 9648 | 9744 | 9849 | 9944 | 0039 | 0135    | 0230 | 0325    | 0419 | 0506    | 4 38.4 |
| 61    | 659 0601 | 0696 | 0791 | 0886 | 0981 | 1077    | 1172 | 1267    | 1362 | 1458    | 5 57.6 |
| 62    | 1467     | 1562 | 1657 | 1752 | 1847 | 1942    | 2037 | 2132    | 2227 | 2322    | 6 67.2 |
| 63    | 2329     | 2424 | 2519 | 2614 | 2709 | 2804    | 2899 | 2994    | 3089 | 3184    | 7 76.8 |
| 64    | 3190     | 3285 | 3380 | 3475 | 3570 | 3665    | 3760 | 3855    | 3950 | 4045    | 8 86.4 |
| 65    | 4050     | 4145 | 4240 | 4335 | 4430 | 4525    | 4620 | 4715    | 4810 | 4905    |        |
| 66    | 5000     | 5095 | 5190 | 5285 | 5380 | 5475    | 5570 | 5665    | 5760 | 5855    |        |
| 67    | 5950     | 6045 | 6140 | 6235 | 6330 | 6425    | 6520 | 6615    | 6710 | 6805    |        |
| 68    | 6900     | 6995 | 7090 | 7185 | 7280 | 7375    | 7470 | 7565    | 7660 | 7755    |        |
| 69    | 7800     | 7895 | 7990 | 8085 | 8180 | 8275    | 8370 | 8465    | 8560 | 8655    |        |
| 4570  | 659 9163 | 9257 | 9352 | 9447 | 9542 | 9637    | 9732 | 9827    | 9922 | 0017    |        |
| 71    | 660 0113 | 0207 | 0302 | 0397 | 0492 | 0587    | 0682 | 0777    | 0872 | 0967    | 1 95   |
| 72    | 1062     | 1157 | 1252 | 1347 | 1442 | 1537    | 1632 | 1727    | 1822 | 1917    | 2 9.5  |
| 73    | 2012     | 2107 | 2202 | 2297 | 2392 | 2487    | 2582 | 2677    | 2772 | 2867    | 3 19.0 |
| 74    | 2962     | 3057 | 3152 | 3247 | 3342 | 3437    | 3532 | 3627    | 3722 | 3817    | 4 28.5 |
| 75    | 3911     | 4006 | 4101 | 4196 | 4291 | 4386    | 4481 | 4576    | 4671 | 4766    | 5 38.0 |
| 76    | 4860     | 4955 | 5050 | 5145 | 5240 | 5335    | 5430 | 5525    | 5620 | 5715    | 6 47.5 |
| 77    | 5809     | 5904 | 5999 | 6094 | 6189 | 6284    | 6379 | 6474    | 6569 | 6664    | 7 57.0 |
| 78    | 6653     | 6748 | 6843 | 6938 | 7033 | 7128    | 7223 | 7318    | 7413 | 7508    | 8 66.5 |
| 79    | 7556     | 7651 | 7746 | 7841 | 7936 | 8031    | 8126 | 8221    | 8316 | 8411    | 9 76.0 |
| 4580  | 660 0654 | 0749 | 0844 | 0939 | 1034 | 1129    | 1224 | 1319    | 1414 | 1509    | 9 85.5 |
| 81    | 9604     | 9699 | 9794 | 9889 | 9984 | 0079    | 0174 | 0269    | 0364 | 0459    |        |
| 82    | 0554     | 0649 | 0744 | 0839 | 0934 | 1029    | 1124 | 1219    | 1314 | 1409    |        |
| 83    | 1499     | 1594 | 1689 | 1784 | 1879 | 1974    | 2069 | 2164    | 2259 | 2354    |        |
| 84    | 2406     | 2501 | 2596 | 2691 | 2786 | 2881    | 2976 | 3071    | 3166 | 3261    |        |
| 85    | 3351     | 3446 | 3541 | 3636 | 3731 | 3826    | 3921 | 4016    | 4111 | 4206    |        |
| 86    | 4301     | 4396 | 4491 | 4586 | 4681 | 4776    | 4871 | 4966    | 5061 | 5156    |        |
| 87    | 5251     | 5346 | 5441 | 5536 | 5631 | 5726    | 5821 | 5916    | 6011 | 6106    | 1 94   |
| 88    | 6201     | 6296 | 6391 | 6486 | 6581 | 6676    | 6771 | 6866    | 6961 | 7056    | 2 9.4  |
| 89    | 7101     | 7196 | 7291 | 7386 | 7481 | 7576    | 7671 | 7766    | 7861 | 7956    | 3 18.2 |
| 4590  | 661 8127 | 8222 | 8317 | 8412 | 8507 | 8602    | 8697 | 8792    | 8887 | 8982    | 4 37.6 |
| 91    | 9077     | 9172 | 9267 | 9362 | 9457 | 9552    | 9647 | 9742    | 9837 | 9932    | 5 47.0 |
| 92    | 662 0119 | 0214 | 0309 | 0404 | 0499 | 0594    | 0689 | 0784    | 0879 | 0974    | 6 56.4 |
| 93    | 0994     | 1089 | 1184 | 1279 | 1374 | 1469    | 1564 | 1659    | 1754 | 1849    | 7 65.8 |
| 94    | 1944     | 2039 | 2134 | 2229 | 2324 | 2419    | 2514 | 2609    | 2704 | 2799    | 8 75.3 |
| 95    | 2899     | 2994 | 3089 | 3184 | 3279 | 3374    | 3469 | 3564    | 3659 | 3754    | 9 84.6 |
| 96    | 3854     | 3949 | 4044 | 4139 | 4234 | 4329    | 4424 | 4519    | 4614 | 4709    |        |
| 97    | 4804     | 4899 | 4994 | 5089 | 5184 | 5279    | 5374 | 5469    | 5564 | 5659    |        |
| 98    | 5709     | 5804 | 5899 | 5994 | 6089 | 6184    | 6279 | 6374    | 6469 | 6564    |        |
| 99    | 6664     | 6759 | 6854 | 6949 | 7044 | 7139    | 7234 | 7329    | 7424 | 7519    |        |
| 4600  | 663 7578 | 7673 | 7767 | 7862 | 7956 | 8050    | 8145 | 8239    | 8334 | 8428    |        |
| N.    | 0        | 1    | 2    | 3    | 4    | 5       | 6    | 7       | 8    | 9       | P. P.  |
| 45500 | 12 18 36 |      |      |      | 4550 | 1 15 50 |      | 8.4 685 | 5396 | T. 6453 |        |
| 45600 | 12 40 0  |      |      |      | 4560 | 1 16 0  |      |         | 5395 | 6450    |        |
| 45700 | 12 41 40 |      |      |      | 4570 | 1 16 10 |      |         | 5393 | 6459    |        |
| 45800 | 12 43 10 |      |      |      | 4580 | 1 16 20 |      |         | 5391 | 6462    |        |
| 45900 | 12 45 0  |      |      |      | 4590 | 1 16 30 |      |         | 5390 | 6466    |        |







| N.   | 0        | 1        | 2        | 3        | 4        | 5        | 6        | 7        | 8        | 9        | P. P. |
|------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-------|
| 4650 | 507 451  | 508 451  | 509 451  | 510 451  | 511 451  | 512 451  | 513 451  | 514 451  | 515 451  | 516 451  |       |
| 51   | 517 451  | 518 451  | 519 451  | 520 451  | 521 451  | 522 451  | 523 451  | 524 451  | 525 451  | 526 451  |       |
| 52   | 527 451  | 528 451  | 529 451  | 530 451  | 531 451  | 532 451  | 533 451  | 534 451  | 535 451  | 536 451  |       |
| 53   | 537 451  | 538 451  | 539 451  | 540 451  | 541 451  | 542 451  | 543 451  | 544 451  | 545 451  | 546 451  |       |
| 54   | 547 451  | 548 451  | 549 451  | 550 451  | 551 451  | 552 451  | 553 451  | 554 451  | 555 451  | 556 451  |       |
| 55   | 557 451  | 558 451  | 559 451  | 560 451  | 561 451  | 562 451  | 563 451  | 564 451  | 565 451  | 566 451  |       |
| 56   | 567 451  | 568 451  | 569 451  | 570 451  | 571 451  | 572 451  | 573 451  | 574 451  | 575 451  | 576 451  |       |
| 57   | 577 451  | 578 451  | 579 451  | 580 451  | 581 451  | 582 451  | 583 451  | 584 451  | 585 451  | 586 451  |       |
| 58   | 587 451  | 588 451  | 589 451  | 590 451  | 591 451  | 592 451  | 593 451  | 594 451  | 595 451  | 596 451  |       |
| 59   | 597 451  | 598 451  | 599 451  | 600 451  | 601 451  | 602 451  | 603 451  | 604 451  | 605 451  | 606 451  |       |
| 4660 | 607 451  | 608 451  | 609 451  | 610 451  | 611 451  | 612 451  | 613 451  | 614 451  | 615 451  | 616 451  |       |
| 61   | 617 451  | 618 451  | 619 451  | 620 451  | 621 451  | 622 451  | 623 451  | 624 451  | 625 451  | 626 451  |       |
| 62   | 627 451  | 628 451  | 629 451  | 630 451  | 631 451  | 632 451  | 633 451  | 634 451  | 635 451  | 636 451  |       |
| 63   | 637 451  | 638 451  | 639 451  | 640 451  | 641 451  | 642 451  | 643 451  | 644 451  | 645 451  | 646 451  |       |
| 64   | 647 451  | 648 451  | 649 451  | 650 451  | 651 451  | 652 451  | 653 451  | 654 451  | 655 451  | 656 451  |       |
| 65   | 657 451  | 658 451  | 659 451  | 660 451  | 661 451  | 662 451  | 663 451  | 664 451  | 665 451  | 666 451  |       |
| 66   | 667 451  | 668 451  | 669 451  | 670 451  | 671 451  | 672 451  | 673 451  | 674 451  | 675 451  | 676 451  |       |
| 67   | 677 451  | 678 451  | 679 451  | 680 451  | 681 451  | 682 451  | 683 451  | 684 451  | 685 451  | 686 451  |       |
| 68   | 687 451  | 688 451  | 689 451  | 690 451  | 691 451  | 692 451  | 693 451  | 694 451  | 695 451  | 696 451  |       |
| 69   | 697 451  | 698 451  | 699 451  | 700 451  | 701 451  | 702 451  | 703 451  | 704 451  | 705 451  | 706 451  |       |
| 4670 | 707 451  | 708 451  | 709 451  | 710 451  | 711 451  | 712 451  | 713 451  | 714 451  | 715 451  | 716 451  |       |
| 71   | 717 451  | 718 451  | 719 451  | 720 451  | 721 451  | 722 451  | 723 451  | 724 451  | 725 451  | 726 451  |       |
| 72   | 727 451  | 728 451  | 729 451  | 730 451  | 731 451  | 732 451  | 733 451  | 734 451  | 735 451  | 736 451  |       |
| 73   | 737 451  | 738 451  | 739 451  | 740 451  | 741 451  | 742 451  | 743 451  | 744 451  | 745 451  | 746 451  |       |
| 74   | 747 451  | 748 451  | 749 451  | 750 451  | 751 451  | 752 451  | 753 451  | 754 451  | 755 451  | 756 451  |       |
| 75   | 757 451  | 758 451  | 759 451  | 760 451  | 761 451  | 762 451  | 763 451  | 764 451  | 765 451  | 766 451  |       |
| 76   | 767 451  | 768 451  | 769 451  | 770 451  | 771 451  | 772 451  | 773 451  | 774 451  | 775 451  | 776 451  |       |
| 77   | 777 451  | 778 451  | 779 451  | 780 451  | 781 451  | 782 451  | 783 451  | 784 451  | 785 451  | 786 451  |       |
| 78   | 787 451  | 788 451  | 789 451  | 790 451  | 791 451  | 792 451  | 793 451  | 794 451  | 795 451  | 796 451  |       |
| 79   | 797 451  | 798 451  | 799 451  | 800 451  | 801 451  | 802 451  | 803 451  | 804 451  | 805 451  | 806 451  |       |
| 4680 | 807 451  | 808 451  | 809 451  | 810 451  | 811 451  | 812 451  | 813 451  | 814 451  | 815 451  | 816 451  |       |
| 81   | 817 451  | 818 451  | 819 451  | 820 451  | 821 451  | 822 451  | 823 451  | 824 451  | 825 451  | 826 451  |       |
| 82   | 827 451  | 828 451  | 829 451  | 830 451  | 831 451  | 832 451  | 833 451  | 834 451  | 835 451  | 836 451  |       |
| 83   | 837 451  | 838 451  | 839 451  | 840 451  | 841 451  | 842 451  | 843 451  | 844 451  | 845 451  | 846 451  |       |
| 84   | 847 451  | 848 451  | 849 451  | 850 451  | 851 451  | 852 451  | 853 451  | 854 451  | 855 451  | 856 451  |       |
| 85   | 857 451  | 858 451  | 859 451  | 860 451  | 861 451  | 862 451  | 863 451  | 864 451  | 865 451  | 866 451  |       |
| 86   | 867 451  | 868 451  | 869 451  | 870 451  | 871 451  | 872 451  | 873 451  | 874 451  | 875 451  | 876 451  |       |
| 87   | 877 451  | 878 451  | 879 451  | 880 451  | 881 451  | 882 451  | 883 451  | 884 451  | 885 451  | 886 451  |       |
| 88   | 887 451  | 888 451  | 889 451  | 890 451  | 891 451  | 892 451  | 893 451  | 894 451  | 895 451  | 896 451  |       |
| 89   | 897 451  | 898 451  | 899 451  | 900 451  | 901 451  | 902 451  | 903 451  | 904 451  | 905 451  | 906 451  |       |
| 4690 | 907 451  | 908 451  | 909 451  | 910 451  | 911 451  | 912 451  | 913 451  | 914 451  | 915 451  | 916 451  |       |
| 91   | 917 451  | 918 451  | 919 451  | 920 451  | 921 451  | 922 451  | 923 451  | 924 451  | 925 451  | 926 451  |       |
| 92   | 927 451  | 928 451  | 929 451  | 930 451  | 931 451  | 932 451  | 933 451  | 934 451  | 935 451  | 936 451  |       |
| 93   | 937 451  | 938 451  | 939 451  | 940 451  | 941 451  | 942 451  | 943 451  | 944 451  | 945 451  | 946 451  |       |
| 94   | 947 451  | 948 451  | 949 451  | 950 451  | 951 451  | 952 451  | 953 451  | 954 451  | 955 451  | 956 451  |       |
| 95   | 957 451  | 958 451  | 959 451  | 960 451  | 961 451  | 962 451  | 963 451  | 964 451  | 965 451  | 966 451  |       |
| 96   | 967 451  | 968 451  | 969 451  | 970 451  | 971 451  | 972 451  | 973 451  | 974 451  | 975 451  | 976 451  |       |
| 97   | 977 451  | 978 451  | 979 451  | 980 451  | 981 451  | 982 451  | 983 451  | 984 451  | 985 451  | 986 451  |       |
| 98   | 987 451  | 988 451  | 989 451  | 990 451  | 991 451  | 992 451  | 993 451  | 994 451  | 995 451  | 996 451  |       |
| 99   | 997 451  | 998 451  | 999 451  | 1000 451 | 1001 451 | 1002 451 | 1003 451 | 1004 451 | 1005 451 | 1006 451 |       |
| 4700 | 1007 451 | 1008 451 | 1009 451 | 1010 451 | 1011 451 | 1012 451 | 1013 451 | 1014 451 | 1015 451 | 1016 451 |       |
| N.   | 0        | 1        | 2        | 3        | 4        | 5        | 6        | 7        | 8        | 9        | P. P. |
| 4650 | 507 451  | 508 451  | 509 451  | 510 451  | 511 451  | 512 451  | 513 451  | 514 451  | 515 451  | 516 451  |       |
| 4660 | 607 451  | 608 451  | 609 451  | 610 451  | 611 451  | 612 451  | 613 451  | 614 451  | 615 451  | 616 451  |       |
| 4670 | 707 451  | 708 451  | 709 451  | 710 451  | 711 451  | 712 451  | 713 451  | 714 451  | 715 451  | 716 451  |       |
| 4680 | 807 451  | 808 451  | 809 451  | 810 451  | 811 451  | 812 451  | 813 451  | 814 451  | 815 451  | 816 451  |       |
| 4690 | 907 451  | 908 451  | 909 451  | 910 451  | 911 451  | 912 451  | 913 451  | 914 451  | 915 451  | 916 451  |       |
| 4700 | 1007 451 | 1008 451 | 1009 451 | 1010 451 | 1011 451 | 1012 451 | 1013 451 | 1014 451 | 1015 451 | 1016 451 |       |



| N.    | 0            | 1    | 2    | 3    | 4    | 5     | 6     | 7     | 8     | 9     | P. P.                                     |
|-------|--------------|------|------|------|------|-------|-------|-------|-------|-------|---|
| 4700  | 672 0979     | 1071 | 1163 | 1256 | 1348 | 1441  | 1533  | 1625  | 1718  | 1810  |   |
| 01    | 1903         | 1995 | 2087 | 2180 | 2272 | 2364  | 2457  | 2549  | 2642  | 2734  |   |
| 02    | 2826         | 2919 | 3011 | 3103 | 3196 | 3288  | 3380  | 3473  | 3565  | 3657  |   |
| 03    | 3750         | 3842 | 3934 | 4027 | 4119 | 4211  | 4304  | 4396  | 4488  | 4581  |   |
| 04    | 4673         | 4765 | 4858 | 4950 | 5042 | 5135  | 5227  | 5319  | 5412  | 5504  |   |
| 05    | 5596         | 5689 | 5781 | 5873 | 5965 | 6058  | 6150  | 6242  | 6335  | 6427  |   |
| 06    | 6519         | 6612 | 6704 | 6796 | 6888 | 6981  | 7073  | 7165  | 7257  | 7350  |   |
| 07    | 7442         | 7534 | 7627 | 7719 | 7811 | 7903  | 7996  | 8088  | 8180  | 8272  | 08  |
| 08    | 8365         | 8457 | 8549 | 8641 | 8734 | 8826  | 8918  | 9010  | 9102  | 9195  | 1 9.3                                     |
| 09    | 9287         | 9379 | 9471 | 9564 | 9656 | 9748  | 9840  | 9932  | 10025 | 10117 | 2 18.6                                    |
| 4710  | 673 0109     | 0301 | 0393 | 0486 | 0578 | 0670  | 0762  | 0854  | 0947  | 1039  | 3 27.9                                    |
| 11    | 1131         | 1223 | 1315 | 1408 | 1500 | 1592  | 1684  | 1776  | 1868  | 1961  | 4 37.2                                    |
| 12    | 2053         | 2145 | 2237 | 2329 | 2421 | 2514  | 2606  | 2698  | 2790  | 2882  | 5 46.5                                    |
| 13    | 2974         | 3067 | 3159 | 3251 | 3343 | 3435  | 3527  | 3619  | 3712  | 3804  | 6 55.8                                    |
| 14    | 3896         | 3988 | 4080 | 4172 | 4264 | 4356  | 4449  | 4541  | 4633  | 4725  | 7 65.1                                    |
| 15    | 4817         | 4909 | 5001 | 5093 | 5185 | 5277  | 5370  | 5462  | 5554  | 5646  | 8 74.4                                    |
| 16    | 5738         | 5830 | 5922 | 6014 | 6106 | 6198  | 6290  | 6383  | 6475  | 6567  | 9 83.7                                    |
| 17    | 6659         | 6751 | 6843 | 6935 | 7027 | 7119  | 7211  | 7303  | 7395  | 7487  |   |
| 18    | 7579         | 7671 | 7763 | 7855 | 7948 | 8040  | 8132  | 8224  | 8316  | 8408  |   |
| 19    | 8500         | 8592 | 8684 | 8776 | 8868 | 8960  | 9052  | 9144  | 9236  | 9328  |   |
| 4720  | 673 9420     | 9512 | 9604 | 9696 | 9788 | 9880  | 9972  | 10064 | 10156 | 10248 |   |
| 21    | 674 0340     | 0432 | 0524 | 0616 | 0708 | 0800  | 0892  | 0984  | 1076  | 1168  | 02  |
| 22    | 1260         | 1352 | 1444 | 1536 | 1628 | 1720  | 1812  | 1904  | 1996  | 2088  | 1 9.2                                     |
| 23    | 2179         | 2271 | 2363 | 2455 | 2547 | 2639  | 2731  | 2823  | 2915  | 3007  | 2 18.4                                    |
| 24    | 3099         | 3191 | 3283 | 3375 | 3467 | 3559  | 3650  | 3742  | 3834  | 3926  | 3 27.6                                    |
| 25    | 4018         | 4110 | 4202 | 4294 | 4386 | 4478  | 4570  | 4662  | 4753  | 4845  | 4 36.8                                    |
| 26    | 4937         | 5029 | 5121 | 5213 | 5305 | 5397  | 5489  | 5580  | 5672  | 5764  | 5 46.0                                    |
| 27    | 5866         | 5958 | 6050 | 6142 | 6234 | 6326  | 6418  | 6509  | 6599  | 6689  | 6 55.2                                    |
| 28    | 6775         | 6867 | 6958 | 7050 | 7142 | 7234  | 7326  | 7418  | 7509  | 7601  | 7 64.4                                    |
| 29    | 7693         | 7785 | 7877 | 7969 | 8060 | 8152  | 8244  | 8336  | 8428  | 8520  | 8 73.6                                    |
| 4730  | 674 8611     | 8703 | 8795 | 8887 | 8979 | 9070  | 9162  | 9254  | 9346  | 9438  | 9 82.8                                    |
| 31    | 9529         | 9621 | 9713 | 9805 | 9897 | 9988  | 10080 | 10172 | 10264 | 10356 |   |
| 32    | 675 0447     | 0539 | 0631 | 0723 | 0814 | 0906  | 0998  | 1090  | 1182  | 1273  |   |
| 33    | 1365         | 1457 | 1549 | 1640 | 1732 | 1824  | 1916  | 2007  | 2099  | 2191  |   |
| 34    | 2283         | 2374 | 2466 | 2558 | 2649 | 2741  | 2833  | 2925  | 3016  | 3108  |   |
| 35    | 3200         | 3292 | 3383 | 3475 | 3567 | 3658  | 3750  | 3842  | 3934  | 4025  |   |
| 36    | 4117         | 4209 | 4300 | 4392 | 4484 | 4575  | 4667  | 4759  | 4850  | 4942  |   |
| 37    | 5034         | 5126 | 5217 | 5309 | 5401 | 5492  | 5584  | 5676  | 5767  | 5859  | 01  |
| 38    | 5951         | 6042 | 6134 | 6226 | 6317 | 6409  | 6501  | 6592  | 6684  | 6775  | 1 9.1                                     |
| 39    | 6867         | 6959 | 7050 | 7142 | 7234 | 7325  | 7417  | 7509  | 7600  | 7692  | 2 18.2                                    |
| 4740  | 675 7783     | 7875 | 7967 | 8058 | 8150 | 8242  | 8333  | 8425  | 8516  | 8608  | 3 27.3                                    |
| 41    | 8700         | 8791 | 8883 | 8974 | 9066 | 9158  | 9249  | 9341  | 9432  | 9524  | 4 36.4                                    |
| 42    | 9615         | 9707 | 9799 | 9890 | 9982 | 10073 | 10165 | 10257 | 10348 | 10440 | 5 45.5                                    |
| 43    | 676 0531     | 0623 | 0714 | 0806 | 0897 | 0989  | 1081  | 1172  | 1264  | 1355  | 6 54.6                                    |
| 44    | 1447         | 1538 | 1630 | 1721 | 1813 | 1905  | 1996  | 2088  | 2179  | 2271  | 7 63.7                                    |
| 45    | 2362         | 2454 | 2545 | 2637 | 2728 | 2820  | 2911  | 3003  | 3094  | 3186  | 8 72.8                                    |
| 46    | 3277         | 3369 | 3460 | 3552 | 3643 | 3735  | 3826  | 3918  | 4009  | 4101  | 9 81.9                                    |
| 47    | 4192         | 4284 | 4375 | 4467 | 4558 | 4650  | 4741  | 4833  | 4924  | 5016  |   |
| 48    | 5107         | 5199 | 5290 | 5382 | 5473 | 5564  | 5656  | 5747  | 5839  | 5930  |   |
| 49    | 6022         | 6113 | 6205 | 6296 | 6387 | 6479  | 6570  | 6662  | 6753  | 6845  |   |
| 4750  | 676 6936     | 7028 | 7119 | 7210 | 7302 | 7393  | 7485  | 7576  | 7667  | 7759  |   |
| N.    | 0            | 1    | 2    | 3    | 4    | 5     | 6     | 7     | 8     | 9     | P. P.                                     |
| 47000 | = 13° 3' 20" |      |      |      |      |       |       |       |       |       | 47000' = 13° 3' 20"                       |
| 47100 | = 13° 5' 0"  |      |      |      |      |       |       |       |       |       | 47100' = 13° 5' 0"                        |
| 47200 | = 13° 6' 40" |      |      |      |      |       |       |       |       |       | 47200' = 13° 6' 40"                       |
| 47300 | = 13° 8' 20" |      |      |      |      |       |       |       |       |       | 47300' = 13° 8' 20"                       |
| 47400 | = 13° 10' 0" |      |      |      |      |       |       |       |       |       | 47400' = 13° 10' 0"                       |
|       |              |      |      |      |      |       |       |       |       |       | 47000' = 1° 18' 20" S. 4.685 5373 T. 6500 |
|       |              |      |      |      |      |       |       |       |       |       | 47100' = 1° 18' 30" 5371 6504             |
|       |              |      |      |      |      |       |       |       |       |       | 47200' = 1° 18' 40" 5370 6507             |
|       |              |      |      |      |      |       |       |       |       |       | 47300' = 1° 18' 50" 5368 6510             |
|       |              |      |      |      |      |       |       |       |       |       | 47400' = 1° 19' 0" 5366 6513              |



| N.   | 0                   | 1    | 2    | 3    | 4                  | 5        | 6    | 7       | 8    | 9    | P. P.  |
|------|---------------------|------|------|------|--------------------|----------|------|---------|------|------|--------|
| 4750 | 676 6936            | 7028 | 7119 | 7210 | 7302               | 7393     | 7485 | 7576    | 7667 | 7759 |        |
| 51   | 7850                | 7942 | 8033 | 8125 | 8216               | 8307     | 8399 | 8490    | 8582 | 8673 |        |
| 52   | 8764                | 8856 | 8947 | 9038 | 9130               | 9221     | 9313 | 9404    | 9495 | 9587 |        |
| 53   | 9678                | 9770 | 9861 | 9952 | 0044               | 0135     | 0226 | 0318    | 0409 | 0500 |        |
| 54   | 677 0592            | 0683 | 0774 | 0866 | 0957               | 1049     | 1140 | 1231    | 1323 | 1414 |        |
| 55   | 1505                | 1597 | 1688 | 1779 | 1871               | 1962     | 2053 | 2145    | 2236 | 2327 |        |
| 56   | 2418                | 2510 | 2601 | 2692 | 2784               | 2875     | 2966 | 3058    | 3149 | 3240 |        |
| 57   | 3332                | 3423 | 3514 | 3605 | 3697               | 3788     | 3879 | 3971    | 4062 | 4153 | 92     |
| 58   | 4244                | 4336 | 4427 | 4518 | 4609               | 4701     | 4792 | 4883    | 4975 | 5066 | 1 9.2  |
| 59   | 5157                | 5248 | 5340 | 5431 | 5522               | 5613     | 5705 | 5796    | 5887 | 5978 | 2 18.4 |
| 4760 | 677 6070            | 6161 | 6252 | 6343 | 6434               | 6526     | 6617 | 6708    | 6799 | 6891 | 3 27.6 |
| 61   | 6982                | 7073 | 7164 | 7255 | 7347               | 7438     | 7529 | 7620    | 7712 | 7803 | 4 36.8 |
| 62   | 7985                | 8076 | 8168 | 8259 | 8350               | 8441     | 8532 | 8623    | 8715 | 8806 | 5 46.0 |
| 63   | 8806                | 8897 | 8988 | 9079 | 9171               | 9262     | 9353 | 9444    | 9535 | 9626 | 6 55.2 |
| 64   | 9718                | 9809 | 9900 | 9991 | 0082               | 0173     | 0264 | 0356    | 0447 | 0538 | 7 64.4 |
| 65   | 678 0629            | 0720 | 0811 | 0902 | 0994               | 1085     | 1176 | 1267    | 1358 | 1449 | 8 73.6 |
| 66   | 1540                | 1632 | 1723 | 1814 | 1905               | 1996     | 2087 | 2178    | 2269 | 2360 | 9 82.8 |
| 67   | 2452                | 2543 | 2634 | 2725 | 2816               | 2907     | 2998 | 3089    | 3180 | 3271 |        |
| 68   | 3362                | 3454 | 3545 | 3636 | 3727               | 3818     | 3909 | 4000    | 4091 | 4182 |        |
| 69   | 4273                | 4364 | 4455 | 4546 | 4637               | 4729     | 4820 | 4911    | 5002 | 5093 |        |
| 4770 | 678 5184            | 5275 | 5366 | 5457 | 5548               | 5639     | 5730 | 5821    | 5912 | 6003 |        |
| 71   | 6094                | 6185 | 6276 | 6367 | 6458               | 6549     | 6640 | 6731    | 6822 | 6913 | 91     |
| 72   | 7004                | 7095 | 7186 | 7277 | 7368               | 7459     | 7550 | 7641    | 7732 | 7823 | 1 9.1  |
| 73   | 7914                | 8005 | 8096 | 8187 | 8278               | 8369     | 8460 | 8551    | 8642 | 8733 | 2 18.2 |
| 74   | 8824                | 8915 | 9006 | 9097 | 9188               | 9279     | 9370 | 9461    | 9552 | 9643 | 3 27.3 |
| 75   | 9734                | 9825 | 9916 | 0007 | 0098               | 0189     | 0279 | 0370    | 0461 | 0552 | 4 36.4 |
| 76   | 679 0643            | 0734 | 0825 | 0916 | 1007               | 1098     | 1189 | 1280    | 1371 | 1461 | 5 45.5 |
| 77   | 1552                | 1643 | 1734 | 1825 | 1916               | 2007     | 2098 | 2189    | 2280 | 2371 | 6 54.6 |
| 78   | 2461                | 2552 | 2643 | 2734 | 2825               | 2916     | 3007 | 3098    | 3189 | 3279 | 7 63.7 |
| 79   | 3370                | 3461 | 3552 | 3643 | 3734               | 3825     | 3916 | 4007    | 4097 | 4188 | 8 72.8 |
| 4780 | 679 4279            | 4370 | 4461 | 4552 | 4642               | 4733     | 4824 | 4915    | 5006 | 5097 | 9 81.9 |
| 81   | 5187                | 5278 | 5369 | 5460 | 5551               | 5642     | 5732 | 5823    | 5914 | 6005 |        |
| 82   | 6096                | 6187 | 6277 | 6368 | 6459               | 6550     | 6641 | 6731    | 6822 | 6913 |        |
| 83   | 7004                | 7095 | 7185 | 7276 | 7367               | 7458     | 7549 | 7639    | 7730 | 7821 |        |
| 84   | 7912                | 8002 | 8093 | 8184 | 8275               | 8366     | 8456 | 8547    | 8638 | 8729 |        |
| 85   | 8819                | 8910 | 9001 | 9092 | 9182               | 9273     | 9364 | 9455    | 9545 | 9636 |        |
| 86   | 9727                | 9818 | 9908 | 9999 | 0090               | 0181     | 0271 | 0362    | 0453 | 0544 |        |
| 87   | 680 0634            | 0725 | 0816 | 0906 | 0997               | 1088     | 1179 | 1269    | 1360 | 1451 | 90     |
| 88   | 1541                | 1632 | 1723 | 1814 | 1904               | 1995     | 2086 | 2176    | 2267 | 2358 | 1 9.0  |
| 89   | 2448                | 2539 | 2630 | 2720 | 2811               | 2902     | 2992 | 3083    | 3174 | 3264 | 2 18.0 |
| 4790 | 680 3355            | 3446 | 3536 | 3627 | 3718               | 3808     | 3899 | 3990    | 4080 | 4171 | 3 27.0 |
| 91   | 4262                | 4352 | 4443 | 4534 | 4624               | 4715     | 4806 | 4896    | 4987 | 5077 | 4 36.0 |
| 92   | 5168                | 5259 | 5349 | 5440 | 5531               | 5621     | 5712 | 5802    | 5893 | 5984 | 5 45.0 |
| 93   | 6074                | 6165 | 6256 | 6346 | 6437               | 6527     | 6618 | 6709    | 6799 | 6890 | 6 54.0 |
| 94   | 6980                | 7071 | 7161 | 7252 | 7343               | 7433     | 7524 | 7614    | 7705 | 7796 | 7 63.0 |
| 95   | 7886                | 7977 | 8067 | 8158 | 8248               | 8339     | 8430 | 8520    | 8611 | 8701 | 8 72.0 |
| 96   | 8792                | 8882 | 8973 | 9063 | 9154               | 9244     | 9335 | 9426    | 9516 | 9607 | 9 81.0 |
| 97   | 9697                | 9788 | 9878 | 9969 | 0059               | 0150     | 0240 | 0331    | 0421 | 0512 |        |
| 98   | 681 0602            | 0693 | 0783 | 0874 | 0964               | 1055     | 1145 | 1236    | 1327 | 1417 |        |
| 99   | 1507                | 1598 | 1688 | 1779 | 1869               | 1960     | 2050 | 2141    | 2231 | 2322 |        |
| 4800 | 681 2412            | 2503 | 2593 | 2684 | 2774               | 2865     | 2955 | 3046    | 3136 | 3227 |        |
| N.   | 0                   | 1    | 2    | 3    | 4                  | 5        | 6    | 7       | 8    | 9    | P. P.  |
|      | 4750° = 13° 11' 40" |      |      |      | 4750° = 1° 19' 10" | S. 4.685 | 5365 | T. 6516 |      |      |        |
|      | 47600 = 13 13 20    |      |      |      | 4760 = 1 19 20     |          | 5363 | 6520    |      |      |        |
|      | 47700 = 13 15 0     |      |      |      | 4770 = 1 19 30     |          | 5362 | 6523    |      |      |        |
|      | 47800 = 13 16 40    |      |      |      | 4780 = 1 19 40     |          | 5360 | 6526    |      |      |        |
|      | 47900 = 13 18 20    |      |      |      | 4790 = 1 19 50     |          | 5358 | 6529    |      |      |        |







| N.   | 0             | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | P. P.                                   |
|------|---------------|------|------|------|------|------|------|------|------|------|---|
| 4850 | 685 7417      | 7507 | 7596 | 7686 | 7776 | 7865 | 7955 | 8044 | 8134 | 8223 |   |
| 51   | 8313          | 8402 | 8492 | 8581 | 8671 | 8760 | 8850 | 8939 | 9029 | 9118 |   |
| 52   | 9208          | 9297 | 9387 | 9476 | 9566 | 9655 | 9745 | 9834 | 9924 | 0013 |   |
| 53   | 686 0103      | 0192 | 0282 | 0371 | 0461 | 0550 | 0640 | 0729 | 0819 | 0908 |   |
| 54   | 0998          | 1087 | 1177 | 1266 | 1356 | 1445 | 1535 | 1624 | 1713 | 1803 |   |
| 55   | 1892          | 1982 | 2071 | 2161 | 2250 | 2340 | 2429 | 2518 | 2608 | 2697 |   |
| 56   | 2787          | 2876 | 2966 | 3055 | 3145 | 3234 | 3323 | 3413 | 3502 | 3592 |   |
| 57   | 3681          | 3770 | 3860 | 3949 | 4039 | 4128 | 4217 | 4307 | 4396 | 4486 | 1 90                                    |
| 58   | 4575          | 4665 | 4754 | 4843 | 4933 | 5022 | 5111 | 5201 | 5290 | 5380 | 2 18.0                                  |
| 59   | 5469          | 5558 | 5648 | 5737 | 5826 | 5916 | 6005 | 6095 | 6184 | 6273 | 3 27.0                                  |
| 4860 | 686 6363      | 6452 | 6541 | 6631 | 6720 | 6809 | 6899 | 6988 | 7078 | 7167 | 4 36.0                                  |
| 61   | 7256          | 7346 | 7435 | 7524 | 7614 | 7703 | 7792 | 7882 | 7971 | 8060 | 5 45.0                                  |
| 62   | 8150          | 8239 | 8328 | 8418 | 8507 | 8596 | 8685 | 8775 | 8864 | 8953 | 6 54.0                                  |
| 63   | 9043          | 9132 | 9221 | 9311 | 9400 | 9489 | 9578 | 9668 | 9757 | 9846 | 7 63.0                                  |
| 64   | 9936          | 0025 | 0114 | 0204 | 0293 | 0382 | 0471 | 0561 | 0650 | 0739 | 8 72.0                                  |
| 65   | 687 0828      | 0918 | 1007 | 1096 | 1186 | 1275 | 1364 | 1453 | 1543 | 1632 | 9 81.0                                  |
| 66   | 1721          | 1810 | 1900 | 1989 | 2078 | 2167 | 2257 | 2346 | 2435 | 2524 |   |
| 67   | 2613          | 2703 | 2792 | 2881 | 2970 | 3060 | 3149 | 3238 | 3327 | 3416 |   |
| 68   | 3506          | 3595 | 3684 | 3773 | 3863 | 3952 | 4041 | 4130 | 4219 | 4309 |   |
| 69   | 4398          | 4487 | 4576 | 4665 | 4755 | 4844 | 4933 | 5022 | 5111 | 5200 |   |
| 4870 | 687 5290      | 5379 | 5468 | 5557 | 5646 | 5735 | 5825 | 5914 | 6003 | 6092 |   |
| 71   | 6181          | 6270 | 6360 | 6449 | 6538 | 6627 | 6716 | 6805 | 6895 | 6984 | 1 80                                    |
| 72   | 7073          | 7162 | 7251 | 7340 | 7429 | 7518 | 7608 | 7697 | 7786 | 7875 | 2 8.0                                   |
| 73   | 7964          | 8053 | 8142 | 8231 | 8321 | 8410 | 8499 | 8588 | 8677 | 8766 | 3 17.8                                  |
| 74   | 8855          | 8944 | 9033 | 9123 | 9212 | 9301 | 9390 | 9479 | 9568 | 9657 | 4 26.7                                  |
| 75   | 9746          | 9835 | 9924 | 0013 | 0103 | 0192 | 0281 | 0370 | 0459 | 0548 | 5 35.6                                  |
| 76   | 688 0637      | 0726 | 0815 | 0904 | 0993 | 1082 | 1171 | 1260 | 1349 | 1439 | 6 44.5                                  |
| 77   | 1528          | 1617 | 1706 | 1795 | 1884 | 1973 | 2062 | 2151 | 2240 | 2329 | 7 53.4                                  |
| 78   | 2418          | 2507 | 2596 | 2685 | 2774 | 2863 | 2952 | 3041 | 3130 | 3219 | 8 62.3                                  |
| 79   | 3308          | 3397 | 3486 | 3575 | 3664 | 3753 | 3842 | 3931 | 4020 | 4109 | 9 71.2                                  |
| 4880 | 688 4198      | 4287 | 4376 | 4465 | 4554 | 4643 | 4732 | 4821 | 4910 | 4999 |   |
| 81   | 5088          | 5177 | 5266 | 5355 | 5444 | 5533 | 5622 | 5711 | 5800 | 5889 |   |
| 82   | 5978          | 6067 | 6156 | 6245 | 6334 | 6423 | 6511 | 6600 | 6689 | 6778 |   |
| 83   | 6867          | 6956 | 7045 | 7134 | 7223 | 7312 | 7401 | 7490 | 7579 | 7668 |   |
| 84   | 7757          | 7845 | 7934 | 8023 | 8112 | 8201 | 8290 | 8379 | 8468 | 8557 |   |
| 85   | 8646          | 8735 | 8823 | 8912 | 9001 | 9090 | 9179 | 9268 | 9357 | 9446 |   |
| 86   | 9535          | 9624 | 9712 | 9801 | 9890 | 9979 | 0068 | 0157 | 0246 | 0335 |   |
| 87   | 689 0423      | 0512 | 0601 | 0690 | 0779 | 0868 | 0957 | 1045 | 1134 | 1223 | 1 88                                    |
| 88   | 1312          | 1401 | 1490 | 1579 | 1667 | 1756 | 1845 | 1934 | 2023 | 2112 | 2 8.8                                   |
| 89   | 2200          | 2289 | 2378 | 2467 | 2556 | 2645 | 2733 | 2822 | 2911 | 3000 | 3 17.6                                  |
| 4890 | 689 3089      | 3177 | 3266 | 3355 | 3444 | 3533 | 3621 | 3710 | 3799 | 3888 | 4 26.4                                  |
| 91   | 3977          | 4065 | 4154 | 4243 | 4332 | 4421 | 4509 | 4598 | 4687 | 4776 | 5 35.2                                  |
| 92   | 4864          | 4953 | 5042 | 5131 | 5220 | 5308 | 5397 | 5486 | 5575 | 5663 | 6 44.0                                  |
| 93   | 5752          | 5841 | 5930 | 6018 | 6107 | 6196 | 6285 | 6373 | 6462 | 6551 | 7 52.8                                  |
| 94   | 6640          | 6728 | 6817 | 6906 | 6995 | 7083 | 7172 | 7261 | 7350 | 7438 | 8 61.6                                  |
| 95   | 7527          | 7616 | 7704 | 7793 | 7882 | 7971 | 8059 | 8148 | 8237 | 8325 | 9 70.4                                  |
| 96   | 8414          | 8503 | 8591 | 8680 | 8769 | 8858 | 8946 | 9035 | 9124 | 9212 |   |
| 97   | 9301          | 9390 | 9478 | 9567 | 9656 | 9744 | 9833 | 9922 | 0010 | 0099 |   |
| 98   | 690 0188      | 0276 | 0365 | 0454 | 0542 | 0631 | 0720 | 0808 | 0897 | 0986 |   |
| 99   | 1074          | 1163 | 1252 | 1340 | 1429 | 1518 | 1606 | 1695 | 1784 | 1872 |   |
| 4900 | 690 1961      | 2049 | 2138 | 2227 | 2315 | 2404 | 2493 | 2581 | 2670 | 2758 |   |
| N.   | 0             | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | P. P.                                   |
| 4850 | = 13° 28' 20" |      |      |      |      |      |      |      |      |      | 4850 = 1° 20' 50" S. 4.685 5348 T. 6549 |
| 4860 | = 13 30 0     |      |      |      |      |      |      |      |      |      | 4860 = 1 21 0 5347 6552                 |
| 4870 | = 13 31 40    |      |      |      |      |      |      |      |      |      | 4870 = 1 21 10 5345 6556                |
| 4880 | = 13 33 20    |      |      |      |      |      |      |      |      |      | 4880 = 1 21 20 5344 6559                |
| 4890 | = 13 35 0     |      |      |      |      |      |      |      |      |      | 4890 = 1 21 30 5342 6562                |



| N.    | 0             | 1    | 2    | 3    | 4     | 5            | 6        | 7    | 8       | 9    | P. P.  |
|-------|---------------|------|------|------|-------|--------------|----------|------|---------|------|--------|
| 4900  | 690 1961      | 2049 | 2138 | 2227 | 2315  | 2404         | 2493     | 2581 | 2670    | 2758 |        |
| 01    | 2847          | 2936 | 3024 | 3113 | 3201  | 3290         | 3379     | 3467 | 3556    | 3644 |        |
| 02    | 3733          | 3822 | 3910 | 3999 | 4087  | 4176         | 4265     | 4353 | 4442    | 4530 |        |
| 03    | 4619          | 4708 | 4796 | 4885 | 4973  | 5062         | 5150     | 5239 | 5327    | 5416 |        |
| 04    | 5505          | 5593 | 5682 | 5770 | 5859  | 5947         | 6036     | 6124 | 6213    | 6302 |        |
| 05    | 6390          | 6479 | 6567 | 6656 | 6744  | 6833         | 6921     | 7010 | 7098    | 7187 |        |
| 06    | 7275          | 7364 | 7452 | 7541 | 7630  | 7718         | 7807     | 7895 | 7984    | 8072 |        |
| 07    | 8161          | 8249 | 8338 | 8426 | 8515  | 8603         | 8692     | 8780 | 8869    | 8957 | 1 80   |
| 08    | 9046          | 9134 | 9223 | 9311 | 9399  | 9488         | 9576     | 9665 | 9753    | 9842 | 2 8.9  |
| 09    | 9930          | 0019 | 0107 | 0196 | 0284  | 0373         | 0461     | 0550 | 0638    | 0726 | 3 17.8 |
| 4910  | 691 0815      | 0903 | 0992 | 1080 | 1169  | 1257         | 1346     | 1434 | 1522    | 1611 | 4 26.7 |
| 11    | 1699          | 1788 | 1876 | 1965 | 2053  | 2141         | 2230     | 2318 | 2407    | 2495 | 5 35.6 |
| 12    | 2584          | 2672 | 2760 | 2849 | 2937  | 3026         | 3114     | 3202 | 3291    | 3379 | 6 53.4 |
| 13    | 3468          | 3556 | 3644 | 3733 | 3821  | 3910         | 3998     | 4086 | 4175    | 4263 | 7 62.3 |
| 14    | 4352          | 4440 | 4528 | 4617 | 4705  | 4793         | 4882     | 4970 | 5058    | 5147 | 8 71.2 |
| 15    | 5235          | 5324 | 5412 | 5500 | 5589  | 5677         | 5765     | 5854 | 5942    | 6030 | 9 80.1 |
| 16    | 6119          | 6207 | 6295 | 6384 | 6472  | 6560         | 6649     | 6737 | 6825    | 6914 |        |
| 17    | 7002          | 7090 | 7179 | 7267 | 7355  | 7444         | 7532     | 7620 | 7709    | 7797 |        |
| 18    | 7885          | 7974 | 8062 | 8150 | 8238  | 8327         | 8415     | 8503 | 8592    | 8680 |        |
| 19    | 8768          | 8857 | 8945 | 9033 | 9121  | 9210         | 9298     | 9386 | 9474    | 9563 |        |
| 4920  | 691 9651      | 9739 | 9828 | 9916 | 0004  | 0092         | 0181     | 0269 | 0357    | 0445 |        |
| 21    | 692 0534      | 0622 | 0710 | 0798 | 0887  | 0975         | 1063     | 1151 | 1240    | 1328 | 1 88   |
| 22    | 1416          | 1504 | 1593 | 1681 | 1769  | 1857         | 1945     | 2034 | 2122    | 2210 | 2 8.8  |
| 23    | 2298          | 2387 | 2475 | 2563 | 2651  | 2739         | 2828     | 2916 | 3004    | 3092 | 3 17.6 |
| 24    | 3180          | 3269 | 3357 | 3445 | 3533  | 3621         | 3710     | 3798 | 3886    | 3974 | 4 26.4 |
| 25    | 4062          | 4151 | 4239 | 4327 | 4415  | 4503         | 4591     | 4680 | 4768    | 4856 | 5 35.2 |
| 26    | 4944          | 5032 | 5120 | 5209 | 5297  | 5385         | 5473     | 5561 | 5649    | 5737 | 6 44.0 |
| 27    | 5826          | 5914 | 6002 | 6090 | 6178  | 6266         | 6354     | 6443 | 6531    | 6619 | 7 52.8 |
| 28    | 6707          | 6795 | 6883 | 6971 | 7059  | 7148         | 7236     | 7324 | 7412    | 7500 | 8 61.6 |
| 29    | 7588          | 7676 | 7764 | 7853 | 7941  | 8029         | 8117     | 8205 | 8293    | 8381 | 9 70.4 |
| 4930  | 692 8469      | 8557 | 8645 | 8733 | 8822  | 8910         | 8998     | 9086 | 9174    | 9262 |        |
| 31    | 9350          | 9438 | 9526 | 9614 | 9702  | 9790         | 9878     | 9967 | 0055    | 0143 |        |
| 32    | 693 0231      | 0319 | 0407 | 0495 | 0583  | 0671         | 0759     | 0847 | 0935    | 1023 |        |
| 33    | 1111          | 1199 | 1287 | 1375 | 1463  | 1551         | 1639     | 1727 | 1815    | 1903 |        |
| 34    | 1991          | 2079 | 2167 | 2256 | 2344  | 2432         | 2520     | 2608 | 2696    | 2784 |        |
| 35    | 2872          | 2960 | 3048 | 3136 | 3224  | 3312         | 3400     | 3488 | 3576    | 3664 |        |
| 36    | 3752          | 3839 | 3927 | 4015 | 4103  | 4191         | 4279     | 4367 | 4455    | 4543 |        |
| 37    | 4631          | 4719 | 4807 | 4895 | 4983  | 5071         | 5159     | 5247 | 5335    | 5423 | 1 87   |
| 38    | 5511          | 5599 | 5687 | 5775 | 5863  | 5951         | 6039     | 6126 | 6214    | 6302 | 2 17.4 |
| 39    | 6390          | 6478 | 6566 | 6654 | 6742  | 6830         | 6918     | 7006 | 7094    | 7182 | 3 26.1 |
| 4940  | 693 7269      | 7357 | 7445 | 7533 | 7621  | 7709         | 7797     | 7885 | 7973    | 8061 | 4 34.8 |
| 41    | 8149          | 8236 | 8324 | 8412 | 8500  | 8588         | 8676     | 8764 | 8852    | 8940 | 5 43.5 |
| 42    | 9027          | 9115 | 9203 | 9291 | 9379  | 9467         | 9555     | 9643 | 9730    | 9818 | 6 52.2 |
| 43    | 9906          | 9994 | 0082 | 0170 | 0258  | 0345         | 0433     | 0521 | 0609    | 0697 | 7 60.9 |
| 44    | 694 0785      | 0872 | 0960 | 1048 | 1136  | 1224         | 1312     | 1399 | 1487    | 1575 | 8 69.6 |
| 45    | 1663          | 1751 | 1839 | 1926 | 2014  | 2102         | 2190     | 2278 | 2366    | 2453 | 9 78.3 |
| 46    | 2541          | 2629 | 2717 | 2805 | 2892  | 2980         | 3068     | 3156 | 3244    | 3331 |        |
| 47    | 3419          | 3507 | 3595 | 3682 | 3770  | 3858         | 3946     | 4034 | 4121    | 4209 |        |
| 48    | 4297          | 4385 | 4472 | 4560 | 4648  | 4736         | 4824     | 4911 | 4999    | 5087 |        |
| 49    | 5175          | 5262 | 5350 | 5438 | 5526  | 5613         | 5701     | 5789 | 5877    | 5964 |        |
| 4950  | 694 6052      | 6140 | 6227 | 6315 | 6403  | 6491         | 6578     | 6666 | 6754    | 6842 |        |
| N.    | 0             | 1    | 2    | 3    | 4     | 5            | 6        | 7    | 8       | 9    | P. P.  |
| 49000 | = 13° 36' 40" |      |      |      | 49000 | = 1° 21' 40" | S. 4.685 | 5340 | T. 6566 |      |        |
| 49100 | = 13 38 20    |      |      |      | 49100 | = 1 21 50    |          | 5339 | 6569    |      |        |
| 49200 | = 13 40 0     |      |      |      | 49200 | = 1 22 0     |          | 5337 | 6572    |      |        |
| 49300 | = 13 41 40    |      |      |      | 49300 | = 1 22 10    |          | 5335 | 6576    |      |        |
| 49400 | = 13 43 20    |      |      |      | 49400 | = 1 22 20    |          | 5333 | 6579    |      |        |



| N.    | 0            | 1    | 2    | 3    | 4     | 5            | 6        | 7    | 8       | 9    | P. P.  |
|-------|--------------|------|------|------|-------|--------------|----------|------|---------|------|--------|
| 4950  | 694 6052     | 6140 | 6227 | 6315 | 6403  | 6491         | 6578     | 6666 | 6754    | 6842 |        |
| 51    | 6929         | 7017 | 7105 | 7192 | 7280  | 7368         | 7456     | 7543 | 7631    | 7719 |        |
| 52    | 7806         | 7894 | 7982 | 8069 | 8157  | 8245         | 8333     | 8420 | 8508    | 8596 |        |
| 53    | 8683         | 8771 | 8859 | 8946 | 9034  | 9122         | 9209     | 9297 | 9385    | 9472 |        |
| 54    | 9560         | 9648 | 9735 | 9823 | 9911  | 9998         | 0086     | 0174 | 0261    | 0349 |        |
| 55    | 695 0437     | 0524 | 0612 | 0700 | 0787  | 0875         | 0962     | 1050 | 1138    | 1225 |        |
| 56    | 1313         | 1401 | 1488 | 1576 | 1663  | 1751         | 1839     | 1926 | 2014    | 2102 |        |
| 57    | 2189         | 2277 | 2364 | 2452 | 2540  | 2627         | 2715     | 2802 | 2890    | 2978 | 1 88   |
| 58    | 3065         | 3153 | 3240 | 3328 | 3416  | 3503         | 3591     | 3678 | 3766    | 3854 | 2 17.6 |
| 59    | 3941         | 4029 | 4116 | 4204 | 4291  | 4379         | 4467     | 4554 | 4642    | 4729 | 3 26.4 |
| 4960  | 695 4817     | 4904 | 4992 | 5079 | 5167  | 5255         | 5342     | 5430 | 5517    | 5605 | 4 35.2 |
| 61    | 5692         | 5780 | 5867 | 5955 | 6042  | 6130         | 6217     | 6305 | 6393    | 6480 | 5 44.0 |
| 62    | 6568         | 6655 | 6743 | 6830 | 6918  | 7005         | 7093     | 7180 | 7268    | 7355 | 6 52.8 |
| 63    | 7443         | 7530 | 7618 | 7705 | 7793  | 7880         | 7968     | 8055 | 8143    | 8230 | 7 61.6 |
| 64    | 8318         | 8405 | 8493 | 8580 | 8668  | 8755         | 8843     | 8930 | 9018    | 9105 | 8 70.4 |
| 65    | 9193         | 9280 | 9367 | 9455 | 9542  | 9630         | 9717     | 9805 | 9892    | 9980 | 9 79.2 |
| 66    | 696 0067     | 0155 | 0242 | 0330 | 0417  | 0504         | 0592     | 0679 | 0767    | 0854 |        |
| 67    | 0942         | 1029 | 1116 | 1204 | 1291  | 1379         | 1466     | 1554 | 1641    | 1728 |        |
| 68    | 1816         | 1903 | 1991 | 2078 | 2166  | 2253         | 2340     | 2428 | 2515    | 2603 |        |
| 69    | 2690         | 2777 | 2865 | 2952 | 3040  | 3127         | 3214     | 3302 | 3389    | 3477 |        |
| 4970  | 696 3564     | 3651 | 3739 | 3826 | 3913  | 4001         | 4088     | 4176 | 4263    | 4350 |        |
| 71    | 4438         | 4525 | 4612 | 4700 | 4787  | 4874         | 4962     | 5049 | 5137    | 5224 | 1 87   |
| 72    | 5311         | 5399 | 5486 | 5573 | 5661  | 5748         | 5835     | 5923 | 6010    | 6097 | 2 17.4 |
| 73    | 6185         | 6272 | 6359 | 6447 | 6534  | 6621         | 6709     | 6796 | 6883    | 6970 | 3 26.1 |
| 74    | 7058         | 7145 | 7232 | 7320 | 7407  | 7494         | 7582     | 7669 | 7756    | 7844 | 4 34.8 |
| 75    | 7931         | 8018 | 8105 | 8193 | 8280  | 8367         | 8455     | 8542 | 8629    | 8716 | 5 43.5 |
| 76    | 8804         | 8891 | 8978 | 9066 | 9153  | 9240         | 9327     | 9415 | 9502    | 9589 | 6 52.2 |
| 77    | 9676         | 9764 | 9851 | 9938 | 0025  | 0113         | 0200     | 0287 | 0374    | 0462 | 7 60.9 |
| 78    | 697 0549     | 0636 | 0723 | 0811 | 0898  | 0985         | 1072     | 1160 | 1247    | 1334 | 8 69.6 |
| 79    | 1421         | 1508 | 1596 | 1683 | 1770  | 1857         | 1945     | 2032 | 2119    | 2206 | 9 78.3 |
| 4980  | 697 2293     | 2381 | 2468 | 2555 | 2642  | 2729         | 2817     | 2904 | 2991    | 3078 |        |
| 81    | 3165         | 3253 | 3340 | 3427 | 3514  | 3601         | 3689     | 3776 | 3863    | 3950 |        |
| 82    | 4037         | 4124 | 4212 | 4299 | 4386  | 4473         | 4560     | 4647 | 4735    | 4822 |        |
| 83    | 4909         | 4996 | 5083 | 5170 | 5257  | 5345         | 5432     | 5519 | 5606    | 5693 |        |
| 84    | 5780         | 5867 | 5955 | 6042 | 6129  | 6216         | 6303     | 6390 | 6477    | 6565 |        |
| 85    | 6652         | 6739 | 6826 | 6913 | 7000  | 7087         | 7174     | 7261 | 7349    | 7436 |        |
| 86    | 7523         | 7610 | 7697 | 7784 | 7871  | 7958         | 8045     | 8132 | 8220    | 8307 |        |
| 87    | 8394         | 8481 | 8568 | 8655 | 8742  | 8829         | 8916     | 9003 | 9090    | 9177 | 1 86   |
| 88    | 9264         | 9352 | 9439 | 9526 | 9613  | 9700         | 9787     | 9874 | 9961    | 0048 | 2 17.2 |
| 89    | 698 0135     | 0222 | 0309 | 0396 | 0483  | 0570         | 0657     | 0744 | 0831    | 0918 | 3 25.8 |
| 4990  | 698 1005     | 1092 | 1180 | 1267 | 1354  | 1441         | 1528     | 1615 | 1702    | 1789 | 4 34.4 |
| 91    | 1876         | 1963 | 2050 | 2137 | 2224  | 2311         | 2398     | 2485 | 2572    | 2659 | 5 43.0 |
| 92    | 2746         | 2833 | 2920 | 3007 | 3094  | 3181         | 3268     | 3355 | 3442    | 3529 | 6 51.6 |
| 93    | 3616         | 3703 | 3790 | 3877 | 3964  | 4051         | 4138     | 4224 | 4311    | 4398 | 7 60.2 |
| 94    | 4485         | 4572 | 4659 | 4746 | 4833  | 4920         | 5007     | 5094 | 5181    | 5268 | 8 68.8 |
| 95    | 5355         | 5442 | 5529 | 5616 | 5703  | 5790         | 5877     | 5964 | 6050    | 6137 | 9 77.4 |
| 96    | 6224         | 6311 | 6398 | 6485 | 6572  | 6659         | 6746     | 6833 | 6920    | 7007 |        |
| 97    | 7093         | 7180 | 7267 | 7354 | 7441  | 7528         | 7615     | 7702 | 7789    | 7876 |        |
| 98    | 7963         | 8049 | 8136 | 8223 | 8310  | 8397         | 8484     | 8571 | 8658    | 8744 |        |
| 99    | 8831         | 8918 | 9005 | 9092 | 9179  | 9266         | 9353     | 9439 | 9526    | 9613 |        |
| 5000  | 698 9700     | 9787 | 9874 | 9961 | 0047  | 0134         | 0221     | 0308 | 0395    | 0482 |        |
| N.    | 0            | 1    | 2    | 3    | 4     | 5            | 6        | 7    | 8       | 9    | P. P.  |
| 49500 | = 13° 45' 0" |      |      |      | 49500 | = 1° 22' 30" | S. 4.685 | 5332 | T. 6583 |      |        |
| 49600 | = 13 46 40   |      |      |      | 49600 | = 1 22 40    |          | 5330 | 6586    |      |        |
| 49700 | = 13 48 20   |      |      |      | 49700 | = 1 22 50    |          | 5328 | 6589    |      |        |
| 49800 | = 13 50 0    |      |      |      | 49800 | = 1 23 0     |          | 5327 | 6593    |      |        |
| 49900 | = 13 51 40   |      |      |      | 49900 | = 1 23 10    |          | 5325 | 6596    |      |        |







| N.   | 0                   | 1    | 2    | 3     | 4                   | 5        | 6     | 7       | 8     | 9     | P. P.  |
|------|---------------------|------|------|-------|---------------------|----------|-------|---------|-------|-------|--------|
| 5050 | 703 2914            | 3000 | 3086 | 3172  | 3258                | 3344     | 3430  | 3516    | 3602  | 3688  |        |
| 51   | 3774                | 3860 | 3946 | 4032  | 4118                | 4204     | 4290  | 4376    | 4461  | 4547  |        |
| 52   | 4633                | 4719 | 4805 | 4891  | 4977                | 5063     | 5149  | 5235    | 5321  | 5407  |        |
| 53   | 5493                | 5579 | 5665 | 5751  | 5837                | 5923     | 6009  | 6095    | 6181  | 6266  |        |
| 54   | 6352                | 6438 | 6524 | 6610  | 6696                | 6782     | 6868  | 6954    | 7040  | 7126  |        |
| 55   | 7212                | 7298 | 7383 | 7469  | 7555                | 7641     | 7727  | 7813    | 7899  | 7985  |        |
| 56   | 8071                | 8157 | 8242 | 8328  | 8414                | 8500     | 8586  | 8672    | 8758  | 8844  |        |
| 57   | 8930                | 9015 | 9101 | 9187  | 9273                | 9359     | 9445  | 9531    | 9617  | 9702  |        |
| 58   | 9788                | 9874 | 9960 | 10046 | 10132               | 10218    | 10303 | 10389   | 10475 | 10561 |        |
| 59   | 704 0647            | 0733 | 0818 | 0904  | 0990                | 1076     | 1162  | 1248    | 1334  | 1419  |        |
| 5060 | 704 1505            | 1591 | 1677 | 1763  | 1848                | 1934     | 2020  | 2106    | 2192  | 2278  |        |
| 61   | 2363                | 2449 | 2535 | 2621  | 2707                | 2792     | 2878  | 2964    | 3050  | 3136  | 86     |
| 62   | 3221                | 3307 | 3393 | 3479  | 3565                | 3650     | 3736  | 3822    | 3908  | 3993  | 1 8.6  |
| 63   | 4079                | 4165 | 4251 | 4337  | 4422                | 4508     | 4594  | 4680    | 4765  | 4851  | 2 17.2 |
| 64   | 4937                | 5023 | 5108 | 5194  | 5280                | 5366     | 5452  | 5537    | 5623  | 5709  | 3 25.8 |
| 65   | 5794                | 5880 | 5966 | 6052  | 6137                | 6223     | 6309  | 6395    | 6480  | 6566  | 4 34.4 |
| 66   | 6652                | 6738 | 6823 | 6909  | 6995                | 7080     | 7166  | 7252    | 7338  | 7423  | 5 43.0 |
| 67   | 7509                | 7595 | 7680 | 7766  | 7852                | 7938     | 8023  | 8109    | 8195  | 8280  | 6 51.6 |
| 68   | 8366                | 8452 | 8537 | 8623  | 8709                | 8795     | 8880  | 8966    | 9052  | 9137  | 7 60.2 |
| 69   | 9223                | 9309 | 9394 | 9480  | 9566                | 9651     | 9737  | 9823    | 9908  | 9994  | 8 68.8 |
| 5070 | 705 0080            | 0165 | 0251 | 0337  | 0422                | 0508     | 0594  | 0679    | 0765  | 0850  | 9 77.4 |
| 71   | 0936                | 1022 | 1107 | 1193  | 1279                | 1364     | 1450  | 1536    | 1621  | 1707  |        |
| 72   | 1792                | 1878 | 1964 | 2049  | 2135                | 2221     | 2306  | 2392    | 2477  | 2563  |        |
| 73   | 2649                | 2734 | 2820 | 2905  | 2991                | 3077     | 3162  | 3248    | 3333  | 3419  |        |
| 74   | 3505                | 3590 | 3676 | 3761  | 3847                | 3933     | 4018  | 4104    | 4189  | 4275  |        |
| 75   | 4360                | 4446 | 4532 | 4617  | 4703                | 4788     | 4874  | 4959    | 5045  | 5131  |        |
| 76   | 5216                | 5302 | 5387 | 5473  | 5558                | 5644     | 5729  | 5815    | 5901  | 5986  |        |
| 77   | 6072                | 6157 | 6243 | 6328  | 6414                | 6499     | 6585  | 6670    | 6756  | 6841  |        |
| 78   | 6927                | 7012 | 7098 | 7184  | 7269                | 7355     | 7440  | 7526    | 7611  | 7697  |        |
| 79   | 7782                | 7868 | 7953 | 8039  | 8124                | 8210     | 8295  | 8381    | 8466  | 8552  |        |
| 5080 | 705 8637            | 8723 | 8808 | 8894  | 8979                | 9065     | 9150  | 9236    | 9321  | 9406  |        |
| 81   | 9492                | 9577 | 9663 | 9748  | 9834                | 9919     | 10005 | 10090   | 10176 | 10261 |        |
| 82   | 706 0347            | 0432 | 0518 | 0603  | 0688                | 0774     | 0859  | 0945    | 1030  | 1116  | 85     |
| 83   | 1201                | 1287 | 1372 | 1457  | 1543                | 1628     | 1714  | 1799    | 1885  | 1970  | 1 8.5  |
| 84   | 2055                | 2141 | 2226 | 2312  | 2397                | 2483     | 2568  | 2653    | 2739  | 2824  | 2 17.0 |
| 85   | 2910                | 2995 | 3080 | 3166  | 3251                | 3337     | 3422  | 3507    | 3593  | 3678  | 3 25.5 |
| 86   | 3764                | 3849 | 3934 | 4020  | 4105                | 4190     | 4276  | 4361    | 4447  | 4532  | 4 34.0 |
| 87   | 4617                | 4703 | 4788 | 4873  | 4959                | 5044     | 5130  | 5215    | 5300  | 5386  | 5 42.5 |
| 88   | 5471                | 5556 | 5642 | 5727  | 5812                | 5898     | 5983  | 6068    | 6154  | 6239  | 6 51.0 |
| 89   | 6325                | 6410 | 6495 | 6581  | 6666                | 6751     | 6837  | 6922    | 7007  | 7092  | 7 59.5 |
| 5090 | 706 7178            | 7263 | 7348 | 7434  | 7519                | 7604     | 7690  | 7775    | 7860  | 7946  | 8 68.0 |
| 91   | 8031                | 8116 | 8202 | 8287  | 8372                | 8457     | 8543  | 8628    | 8713  | 8799  | 9 76.5 |
| 92   | 8884                | 8969 | 9055 | 9140  | 9225                | 9310     | 9396  | 9481    | 9566  | 9651  |        |
| 93   | 9737                | 9822 | 9907 | 9993  | 10078               | 10163    | 10248 | 10334   | 10419 | 10504 |        |
| 94   | 707 0580            | 0675 | 0760 | 0845  | 0930                | 1016     | 1101  | 1186    | 1271  | 1357  |        |
| 95   | 1442                | 1527 | 1612 | 1698  | 1783                | 1868     | 1953  | 2039    | 2124  | 2209  |        |
| 96   | 2294                | 2379 | 2465 | 2550  | 2635                | 2720     | 2805  | 2891    | 2976  | 3061  |        |
| 97   | 3146                | 3232 | 3317 | 3402  | 3487                | 3572     | 3658  | 3743    | 3828  | 3913  |        |
| 98   | 3998                | 4083 | 4169 | 4254  | 4339                | 4424     | 4509  | 4595    | 4680  | 4765  |        |
| 99   | 4850                | 4935 | 5020 | 5106  | 5191                | 5276     | 5361  | 5446    | 5531  | 5617  |        |
| 5100 | 707 5702            | 5787 | 5872 | 5957  | 6042                | 6128     | 6213  | 6298    | 6383  | 6468  |        |
| N.   | 0                   | 1    | 2    | 3     | 4                   | 5        | 6     | 7       | 8     | 9     | P. P.  |
|      | 50500" = 14° 1' 40" |      |      |       | 50500" = 1° 24' 10" | S. 4.685 | 5315  | T. 6617 |       |       |        |
|      | 50600" = 14° 3' 20" |      |      |       | 50600" = 1° 24' 20" |          | 5313  | 6620    |       |       |        |
|      | 50700" = 14° 5' 0"  |      |      |       | 50700" = 1° 24' 30" |          | 5311  | 6623    |       |       |        |
|      | 50800" = 14° 6' 40" |      |      |       | 50800" = 1° 24' 40" |          | 5310  | 6627    |       |       |        |
|      | 50900" = 14° 8' 20" |      |      |       | 50900" = 1° 24' 50" |          | 5308  | 6630    |       |       |        |







| N.   | 0                    | 1    | 2    | 3    | 4                   | 5        | 6    | 7       | 8    | 9    | P. P.  |
|------|----------------------|------|------|------|---------------------|----------|------|---------|------|------|--------|
| 5150 | 711 8072             | 8157 | 8241 | 8325 | 8410                | 8494     | 8578 | 8663    | 8747 | 8831 |        |
| 51   | 8915                 | 9000 | 9084 | 9168 | 9253                | 9337     | 9421 | 9506    | 9590 | 9674 |        |
| 52   | 9759                 | 9843 | 9927 | 0011 | 0096                | 0180     | 0264 | 0349    | 0433 | 0517 |        |
| 53   | 712 0601             | 0686 | 0770 | 0854 | 0939                | 1023     | 1107 | 1191    | 1276 | 1360 |        |
| 54   | 1444                 | 1528 | 1613 | 1697 | 1781                | 1865     | 1950 | 2034    | 2118 | 2202 |        |
| 55   | 2287                 | 2371 | 2455 | 2539 | 2624                | 2708     | 2792 | 2876    | 2961 | 3045 |        |
| 56   | 3129                 | 3213 | 3298 | 3382 | 3466                | 3550     | 3634 | 3719    | 3803 | 3887 |        |
| 57   | 3971                 | 4056 | 4140 | 4224 | 4308                | 4392     | 4477 | 4561    | 4645 | 4729 | 1 85   |
| 58   | 4813                 | 4898 | 4982 | 5066 | 5150                | 5234     | 5319 | 5403    | 5487 | 5571 | 2 8.5  |
| 59   | 5655                 | 5739 | 5824 | 5908 | 5992                | 6076     | 6160 | 6245    | 6329 | 6413 | 3 25.5 |
| 5160 | 712 6497             | 6581 | 6665 | 6750 | 6834                | 6918     | 7002 | 7086    | 7170 | 7254 | 4 34.0 |
| 61   | 7339                 | 7423 | 7507 | 7591 | 7675                | 7759     | 7843 | 7928    | 8012 | 8096 | 5 42.5 |
| 62   | 8180                 | 8264 | 8348 | 8432 | 8517                | 8601     | 8685 | 8769    | 8853 | 8937 | 6 51.0 |
| 63   | 9021                 | 9105 | 9189 | 9274 | 9358                | 9442     | 9526 | 9610    | 9694 | 9778 | 7 59.5 |
| 64   | 9862                 | 9946 | 0031 | 0115 | 0199                | 0283     | 0367 | 0451    | 0535 | 0619 | 8 68.0 |
| 65   | 713 0703             | 0787 | 0871 | 0956 | 1040                | 1124     | 1208 | 1292    | 1376 | 1460 | 9 76.5 |
| 66   | 1544                 | 1628 | 1712 | 1796 | 1880                | 1964     | 2048 | 2132    | 2217 | 2301 |        |
| 67   | 2385                 | 2469 | 2553 | 2637 | 2721                | 2805     | 2889 | 2973    | 3057 | 3141 |        |
| 68   | 3225                 | 3309 | 3393 | 3477 | 3561                | 3645     | 3729 | 3813    | 3897 | 3981 |        |
| 69   | 4065                 | 4149 | 4233 | 4317 | 4401                | 4485     | 4569 | 4653    | 4737 | 4821 |        |
| 5170 | 713 4905             | 4989 | 5073 | 5157 | 5241                | 5325     | 5409 | 5493    | 5577 | 5661 |        |
| 71   | 5745                 | 5829 | 5913 | 5997 | 6081                | 6165     | 6249 | 6333    | 6417 | 6501 | 1 84   |
| 72   | 6585                 | 6669 | 6753 | 6837 | 6921                | 7005     | 7089 | 7173    | 7257 | 7341 | 2 8.4  |
| 73   | 7425                 | 7509 | 7593 | 7677 | 7761                | 7845     | 7928 | 8012    | 8096 | 8180 | 3 16.8 |
| 74   | 8264                 | 8348 | 8432 | 8516 | 8600                | 8684     | 8768 | 8852    | 8936 | 9020 | 4 25.2 |
| 75   | 9104                 | 9187 | 9271 | 9355 | 9439                | 9523     | 9607 | 9691    | 9775 | 9859 | 5 33.6 |
| 76   | 9943                 | 0027 | 0110 | 0194 | 0278                | 0362     | 0446 | 0530    | 0614 | 0698 | 6 42.0 |
| 77   | 714 0782             | 0866 | 0949 | 1033 | 1117                | 1201     | 1285 | 1369    | 1453 | 1537 | 7 50.4 |
| 78   | 1620                 | 1704 | 1788 | 1872 | 1956                | 2040     | 2124 | 2208    | 2291 | 2375 | 8 58.8 |
| 79   | 2459                 | 2543 | 2627 | 2711 | 2795                | 2878     | 2962 | 3046    | 3130 | 3214 | 9 67.2 |
| 5180 | 714 3298             | 3381 | 3465 | 3549 | 3633                | 3717     | 3801 | 3884    | 3968 | 4052 |        |
| 81   | 4136                 | 4220 | 4304 | 4387 | 4471                | 4555     | 4639 | 4723    | 4806 | 4890 |        |
| 82   | 4974                 | 5058 | 5142 | 5226 | 5309                | 5393     | 5477 | 5561    | 5645 | 5728 |        |
| 83   | 5812                 | 5896 | 5980 | 6063 | 6147                | 6231     | 6315 | 6399    | 6482 | 6566 |        |
| 84   | 6650                 | 6734 | 6817 | 6901 | 6985                | 7069     | 7153 | 7236    | 7320 | 7404 |        |
| 85   | 7488                 | 7571 | 7655 | 7739 | 7823                | 7906     | 7990 | 8074    | 8158 | 8241 |        |
| 86   | 8325                 | 8409 | 8493 | 8576 | 8660                | 8744     | 8828 | 8911    | 8995 | 9079 |        |
| 87   | 9162                 | 9246 | 9330 | 9414 | 9497                | 9581     | 9665 | 9749    | 9832 | 9916 | 1 83   |
| 88   | 715 0000             | 0083 | 0167 | 0251 | 0335                | 0418     | 0502 | 0586    | 0669 | 0753 | 2 16.6 |
| 89   | 0837                 | 0920 | 1004 | 1088 | 1171                | 1255     | 1339 | 1423    | 1506 | 1590 | 3 24.9 |
| 5190 | 715 1674             | 1757 | 1841 | 1925 | 2008                | 2092     | 2176 | 2259    | 2343 | 2427 | 4 33.2 |
| 91   | 2510                 | 2594 | 2678 | 2761 | 2845                | 2929     | 3012 | 3096    | 3180 | 3263 | 5 41.5 |
| 92   | 3347                 | 3430 | 3514 | 3598 | 3681                | 3765     | 3849 | 3932    | 4016 | 4100 | 6 49.8 |
| 93   | 4183                 | 4267 | 4350 | 4434 | 4518                | 4601     | 4685 | 4769    | 4852 | 4936 | 7 58.1 |
| 94   | 5019                 | 5103 | 5187 | 5270 | 5354                | 5438     | 5521 | 5605    | 5688 | 5772 | 8 66.4 |
| 95   | 5856                 | 5939 | 6023 | 6106 | 6190                | 6273     | 6357 | 6441    | 6524 | 6608 | 9 74.7 |
| 96   | 6691                 | 6775 | 6859 | 6942 | 7026                | 7109     | 7193 | 7276    | 7360 | 7444 |        |
| 97   | 7527                 | 7611 | 7694 | 7778 | 7861                | 7945     | 8029 | 8112    | 8196 | 8279 |        |
| 98   | 8363                 | 8446 | 8530 | 8613 | 8697                | 8780     | 8864 | 8948    | 9031 | 9115 |        |
| 99   | 9198                 | 9282 | 9365 | 9449 | 9532                | 9616     | 9699 | 9783    | 9866 | 9950 |        |
| 5200 | 716 0033             | 0117 | 0200 | 0284 | 0367                | 0451     | 0535 | 0618    | 0702 | 0785 |        |
| N.   | 0                    | 1    | 2    | 3    | 4                   | 5        | 6    | 7       | 8    | 9    | P. P.  |
|      | 51500" = 14° 18' 20" |      |      |      | 51500" = 1° 25' 50" | S. 4.685 | 5297 | T. 6651 |      |      |        |
|      | 51600" = 14 20 0     |      |      |      | 51600" = 1 26 0     |          | 5296 | 6655    |      |      |        |
|      | 51700" = 14 21 40    |      |      |      | 51700" = 1 26 10    |          | 5294 | 6658    |      |      |        |
|      | 51800" = 14 23 20    |      |      |      | 51800" = 1 26 20    |          | 5292 | 6662    |      |      |        |
|      | 51900" = 14 25 0     |      |      |      | 51900" = 1 26 30    |          | 5290 | 6665    |      |      |        |



| N.    | 0             | 1    | 2    | 3    | 4     | 5            | 6        | 7    | 8       | 9    | P. P. |
|-------|---------------|------|------|------|-------|--------------|----------|------|---------|------|-------|
| 5200  | 716 0033      | 0117 | 0200 | 0284 | 0367  | 0451         | 0535     | 0618 | 0702    | 0785 |       |
| 01    | 0869          | 0952 | 1036 | 1119 | 1203  | 1286         | 1370     | 1453 | 1537    | 1620 |       |
| 02    | 1703          | 1787 | 1870 | 1954 | 2037  | 2121         | 2204     | 2288 | 2371    | 2455 |       |
| 03    | 2538          | 2622 | 2705 | 2789 | 2872  | 2956         | 3039     | 3123 | 3206    | 3289 |       |
| 04    | 3373          | 3456 | 3540 | 3623 | 3707  | 3790         | 3874     | 3957 | 4040    | 4124 |       |
| 05    | 4207          | 4291 | 4374 | 4458 | 4541  | 4625         | 4708     | 4791 | 4875    | 4958 |       |
| 06    | 5042          | 5125 | 5208 | 5292 | 5375  | 5459         | 5542     | 5626 | 5709    | 5792 |       |
| 07    | 5876          | 5959 | 6043 | 6126 | 6209  | 6293         | 6376     | 6460 | 6543    | 6626 | 81    |
| 08    | 6710          | 6793 | 6877 | 6960 | 7043  | 7127         | 7210     | 7293 | 7377    | 7460 | 84    |
| 09    | 7544          | 7627 | 7710 | 7794 | 7877  | 7960         | 8044     | 8127 | 8211    | 8294 | 16.8  |
| 5210  | 716 8377      | 8461 | 8544 | 8627 | 8711  | 8794         | 8877     | 8961 | 9044    | 9127 | 25.2  |
| 11    | 9211          | 9294 | 9377 | 9461 | 9544  | 9627         | 9711     | 9794 | 9877    | 9961 | 33.6  |
| 12    | 717 0044      | 0127 | 0211 | 0294 | 0377  | 0461         | 0544     | 0627 | 0711    | 0794 | 42.0  |
| 13    | 0877          | 0961 | 1044 | 1127 | 1210  | 1294         | 1377     | 1460 | 1544    | 1627 | 50.4  |
| 14    | 1710          | 1794 | 1877 | 1960 | 2043  | 2127         | 2210     | 2293 | 2377    | 2460 | 58.8  |
| 15    | 2543          | 2626 | 2710 | 2793 | 2876  | 2959         | 3043     | 3126 | 3209    | 3293 | 67.2  |
| 16    | 3376          | 3459 | 3542 | 3626 | 3709  | 3792         | 3875     | 3959 | 4042    | 4125 | 75.6  |
| 17    | 4208          | 4292 | 4375 | 4458 | 4541  | 4625         | 4708     | 4791 | 4874    | 4958 |       |
| 18    | 5041          | 5124 | 5207 | 5290 | 5374  | 5457         | 5540     | 5623 | 5707    | 5790 |       |
| 19    | 5873          | 5956 | 6039 | 6123 | 6206  | 6289         | 6372     | 6455 | 6539    | 6622 |       |
| 5220  | 717 6705      | 6788 | 6871 | 6955 | 7038  | 7121         | 7204     | 7287 | 7371    | 7454 |       |
| 21    | 7537          | 7620 | 7703 | 7786 | 7870  | 7953         | 8036     | 8119 | 8202    | 8286 | 83    |
| 22    | 8369          | 8452 | 8535 | 8618 | 8701  | 8784         | 8868     | 8951 | 9034    | 9117 | 8.3   |
| 23    | 9200          | 9283 | 9367 | 9450 | 9533  | 9616         | 9699     | 9782 | 9865    | 9949 | 16.6  |
| 24    | 718 0032      | 0115 | 0198 | 0281 | 0364  | 0447         | 0530     | 0614 | 0697    | 0780 | 24.9  |
| 25    | 0863          | 0946 | 1029 | 1112 | 1195  | 1279         | 1362     | 1445 | 1528    | 1611 | 33.2  |
| 26    | 1694          | 1777 | 1860 | 1943 | 2026  | 2110         | 2193     | 2276 | 2359    | 2442 | 41.5  |
| 27    | 2525          | 2608 | 2691 | 2774 | 2857  | 2940         | 3023     | 3107 | 3190    | 3273 | 49.8  |
| 28    | 3356          | 3439 | 3522 | 3605 | 3688  | 3771         | 3854     | 3937 | 4020    | 4103 | 58.1  |
| 29    | 4186          | 4269 | 4353 | 4436 | 4519  | 4602         | 4685     | 4768 | 4851    | 4934 | 66.4  |
| 5230  | 718 5017      | 5100 | 5183 | 5266 | 5349  | 5432         | 5515     | 5598 | 5681    | 5764 | 74.7  |
| 31    | 5847          | 5930 | 6013 | 6096 | 6179  | 6262         | 6345     | 6428 | 6511    | 6594 |       |
| 32    | 6677          | 6760 | 6843 | 6926 | 7009  | 7092         | 7175     | 7258 | 7341    | 7424 |       |
| 33    | 7507          | 7590 | 7673 | 7756 | 7839  | 7922         | 8005     | 8088 | 8171    | 8254 |       |
| 34    | 8337          | 8420 | 8503 | 8586 | 8669  | 8752         | 8835     | 8918 | 9001    | 9084 |       |
| 35    | 9167          | 9250 | 9333 | 9416 | 9499  | 9582         | 9665     | 9748 | 9831    | 9913 |       |
| 36    | 9996          | 0079 | 0162 | 0245 | 0328  | 0411         | 0494     | 0577 | 0660    | 0743 |       |
| 37    | 719 0826      | 0909 | 0992 | 1075 | 1157  | 1240         | 1323     | 1406 | 1489    | 1572 | 82    |
| 38    | 1655          | 1738 | 1821 | 1904 | 1987  | 2069         | 2152     | 2235 | 2318    | 2401 | 8.2   |
| 39    | 2484          | 2567 | 2650 | 2733 | 2816  | 2898         | 2981     | 3064 | 3147    | 3230 | 16.4  |
| 5240  | 719 3313      | 3396 | 3479 | 3562 | 3644  | 3727         | 3810     | 3893 | 3976    | 4059 | 24.6  |
| 41    | 4112          | 4224 | 4307 | 4390 | 4473  | 4556         | 4639     | 4722 | 4804    | 4887 | 32.8  |
| 42    | 4970          | 5053 | 5136 | 5219 | 5302  | 5384         | 5467     | 5550 | 5633    | 5716 | 41.0  |
| 43    | 5799          | 5881 | 5964 | 6047 | 6130  | 6213         | 6296     | 6378 | 6461    | 6544 | 49.2  |
| 44    | 6627          | 6710 | 6792 | 6875 | 6958  | 7041         | 7124     | 7207 | 7289    | 7372 | 57.4  |
| 45    | 7455          | 7538 | 7621 | 7703 | 7786  | 7869         | 7952     | 8034 | 8117    | 8200 | 65.6  |
| 46    | 8283          | 8366 | 8448 | 8531 | 8614  | 8697         | 8780     | 8862 | 8945    | 9028 | 73.8  |
| 47    | 9111          | 9193 | 9276 | 9359 | 9442  | 9524         | 9607     | 9690 | 9773    | 9856 |       |
| 48    | 9938          | 0021 | 0104 | 0187 | 0269  | 0352         | 0435     | 0518 | 0600    | 0683 |       |
| 49    | 720 0766      | 0848 | 0931 | 1014 | 1097  | 1179         | 1262     | 1345 | 1428    | 1510 |       |
| 5250  | 720 1593      | 1676 | 1758 | 1841 | 1924  | 2007         | 2089     | 2172 | 2255    | 2337 |       |
| N.    | 0             | 1    | 2    | 3    | 4     | 5            | 6        | 7    | 8       | 9    | P. P. |
| 52000 | = 14° 26' 40" |      |      |      | 52000 | = 1° 26' 40" | S. 4.685 | 5280 | T. 6669 |      |       |
| 52100 | = 14 28 20    |      |      |      | 52100 | = 1 26 50    |          | 5287 | 6672    |      |       |
| 52200 | = 14 30 0     |      |      |      | 52200 | = 1 27 0     |          | 5285 | 6676    |      |       |
| 52300 | = 14 31 40    |      |      |      | 52300 | = 1 27 10    |          | 5283 | 6680    |      |       |
| 52400 | = 14 33 20    |      |      |      | 52400 | = 1 27 20    |          | 5282 | 6683    |      |       |



| N.   | 0        | 1            | 2    | 3     | 4            | 5        | 6    | 7       | 8    | 9    | P. P.  |
|------|----------|--------------|------|-------|--------------|----------|------|---------|------|------|--------|
| 5250 | 720 1593 | 1676         | 1758 | 1841  | 1924         | 2007     | 2089 | 2172    | 2255 | 2337 |        |
| 51   | 2420     | 2503         | 2586 | 2668  | 2751         | 2834     | 2916 | 2999    | 3082 | 3164 |        |
| 52   | 3247     | 3330         | 3413 | 3495  | 3578         | 3661     | 3743 | 3826    | 3909 | 3991 |        |
| 53   | 4074     | 4157         | 4239 | 4322  | 4405         | 4487     | 4570 | 4653    | 4735 | 4818 |        |
| 54   | 4901     | 4983         | 5066 | 5149  | 5231         | 5314     | 5397 | 5479    | 5562 | 5645 |        |
| 55   | 5727     | 5810         | 5892 | 5975  | 6058         | 6140     | 6223 | 6306    | 6388 | 6471 |        |
| 56   | 6554     | 6636         | 6719 | 6801  | 6884         | 6967     | 7049 | 7132    | 7215 | 7297 | 88     |
| 57   | 7380     | 7462         | 7545 | 7628  | 7710         | 7793     | 7875 | 7958    | 8041 | 8123 | 1 8.3  |
| 58   | 8206     | 8288         | 8371 | 8454  | 8536         | 8619     | 8701 | 8784    | 8867 | 8949 | 2 16.6 |
| 59   | 9032     | 9114         | 9197 | 9279  | 9362         | 9445     | 9527 | 9610    | 9692 | 9775 | 3 24.9 |
| 5260 | 720 9857 | 9940         | 0023 | 0105  | 0188         | 0270     | 0353 | 0435    | 0518 | 0600 | 4 33.2 |
| 61   | 721 0683 | 0766         | 0848 | 0931  | 1013         | 1096     | 1178 | 1261    | 1343 | 1426 | 5 41.5 |
| 62   | 1508     | 1591         | 1674 | 1756  | 1839         | 1921     | 2004 | 2086    | 2169 | 2251 | 6 49.8 |
| 63   | 2334     | 2416         | 2499 | 2581  | 2664         | 2746     | 2829 | 2911    | 2994 | 3076 | 7 58.1 |
| 64   | 3159     | 3241         | 3324 | 3406  | 3489         | 3571     | 3654 | 3736    | 3819 | 3901 | 8 66.4 |
| 65   | 3984     | 4066         | 4149 | 4231  | 4314         | 4396     | 4479 | 4561    | 4644 | 4726 | 9 74.7 |
| 66   | 4809     | 4891         | 4973 | 5056  | 5138         | 5221     | 5303 | 5386    | 5468 | 5551 |        |
| 67   | 5633     | 5716         | 5798 | 5881  | 5963         | 6045     | 6128 | 6210    | 6293 | 6375 |        |
| 68   | 6458     | 6540         | 6623 | 6705  | 6787         | 6870     | 6952 | 7035    | 7117 | 7200 |        |
| 69   | 7282     | 7364         | 7447 | 7529  | 7612         | 7694     | 7777 | 7859    | 7941 | 8024 |        |
| 5270 | 721 8106 | 8189         | 8271 | 8353  | 8436         | 8518     | 8601 | 8683    | 8765 | 8848 |        |
| 71   | 8930     | 9013         | 9095 | 9177  | 9260         | 9342     | 9424 | 9507    | 9589 | 9672 | 82     |
| 72   | 9754     | 9836         | 9919 | 0001  | 0084         | 0166     | 0248 | 0331    | 0413 | 0495 | 1 8.2  |
| 73   | 722 0578 | 0660         | 0742 | 0825  | 0907         | 0990     | 1072 | 1154    | 1237 | 1319 | 2 16.4 |
| 74   | 1401     | 1484         | 1566 | 1648  | 1731         | 1813     | 1895 | 1978    | 2060 | 2142 | 3 24.6 |
| 75   | 2225     | 2307         | 2389 | 2472  | 2554         | 2636     | 2719 | 2801    | 2883 | 2966 | 4 32.8 |
| 76   | 3048     | 3130         | 3212 | 3295  | 3377         | 3459     | 3542 | 3624    | 3706 | 3789 | 5 41.0 |
| 77   | 3871     | 3953         | 4036 | 4118  | 4200         | 4282     | 4365 | 4447    | 4529 | 4612 | 6 49.2 |
| 78   | 4694     | 4776         | 4858 | 4941  | 5023         | 5105     | 5188 | 5270    | 5352 | 5434 | 7 57.4 |
| 79   | 5517     | 5599         | 5681 | 5763  | 5846         | 5928     | 6010 | 6092    | 6175 | 6257 | 8 65.6 |
| 5280 | 722 6339 | 6421         | 6504 | 6586  | 6668         | 6750     | 6833 | 6915    | 6997 | 7079 | 9 73.8 |
| 81   | 7162     | 7244         | 7326 | 7408  | 7491         | 7573     | 7655 | 7737    | 7820 | 7902 |        |
| 82   | 7984     | 8066         | 8148 | 8231  | 8313         | 8395     | 8477 | 8559    | 8642 | 8724 |        |
| 83   | 8806     | 8888         | 8971 | 9053  | 9135         | 9217     | 9299 | 9382    | 9464 | 9546 |        |
| 84   | 9628     | 9710         | 9792 | 9875  | 9957         | 0039     | 0121 | 0203    | 0286 | 0368 |        |
| 85   | 723 0450 | 0532         | 0614 | 0696  | 0779         | 0861     | 0943 | 1025    | 1107 | 1189 |        |
| 86   | 1272     | 1354         | 1436 | 1518  | 1600         | 1682     | 1765 | 1847    | 1929 | 2011 | 81     |
| 87   | 2093     | 2175         | 2257 | 2340  | 2422         | 2504     | 2586 | 2668    | 2750 | 2832 | 1 8.1  |
| 88   | 2914     | 2997         | 3079 | 3161  | 3243         | 3325     | 3407 | 3489    | 3571 | 3654 | 2 16.2 |
| 89   | 3736     | 3818         | 3900 | 3982  | 4064         | 4146     | 4228 | 4310    | 4393 | 4475 | 3 24.3 |
| 5290 | 723 4557 | 4639         | 4721 | 4803  | 4885         | 4967     | 5049 | 5131    | 5213 | 5296 | 4 32.4 |
| 91   | 5378     | 5460         | 5542 | 5624  | 5706         | 5788     | 5870 | 5952    | 6034 | 6116 | 5 40.5 |
| 92   | 6198     | 6280         | 6362 | 6445  | 6527         | 6609     | 6691 | 6773    | 6855 | 6937 | 6 48.6 |
| 93   | 7019     | 7101         | 7183 | 7265  | 7347         | 7429     | 7511 | 7593    | 7675 | 7757 | 7 56.7 |
| 94   | 7839     | 7921         | 8003 | 8085  | 8167         | 8250     | 8332 | 8414    | 8496 | 8578 | 8 64.8 |
| 95   | 8660     | 8742         | 8824 | 8906  | 8988         | 9070     | 9152 | 9234    | 9316 | 9398 | 9 72.9 |
| 96   | 9480     | 9562         | 9644 | 9726  | 9808         | 9890     | 9972 | 0054    | 0136 | 0218 |        |
| 97   | 724 0300 | 0382         | 0464 | 0546  | 0628         | 0710     | 0792 | 0874    | 0956 | 1038 |        |
| 98   | 1120     | 1202         | 1283 | 1365  | 1447         | 1529     | 1611 | 1693    | 1775 | 1857 |        |
| 99   | 1939     | 2021         | 2103 | 2185  | 2267         | 2349     | 2431 | 2513    | 2595 | 2677 |        |
| 5300 | 724 2759 | 2841         | 2923 | 3005  | 3086         | 3168     | 3250 | 3332    | 3414 | 3496 |        |
| N.   | 0        | 1            | 2    | 3     | 4            | 5        | 6    | 7       | 8    | 9    | P. P.  |
|      | 52500    | = 14° 35' 0" |      | 52500 | = 1° 27' 30" | S. 4.685 | 5280 | T. 6687 |      |      |        |
|      | 52600    | = 14 36 40   |      | 52600 | = 1 27 40    |          | 5278 | 6690    |      |      |        |
|      | 52700    | = 14 38 20   |      | 52700 | = 1 27 50    |          | 5276 | 6694    |      |      |        |
|      | 52800    | = 14 40 0    |      | 52800 | = 1 28 0     |          | 5274 | 6697    |      |      |        |
|      | 52900    | = 14 41 40   |      | 52900 | = 1 28 10    |          | 5273 | 6701    |      |      |        |



| N.    | 0        | 1     | 2     | 3     | 4     | 5       | 6     | 7     | 8     | 9     | P. P. |
|-------|----------|-------|-------|-------|-------|---------|-------|-------|-------|-------|-------|
| 5800  | 721 2759 | 2841  | 2923  | 3005  | 3086  | 3168    | 3250  | 3332  | 3414  | 3496  |       |
| 01    | 3578     | 3660  | 3742  | 3824  | 3906  | 3988    | 4070  | 4152  | 4234  | 4316  |       |
| 02    | 4397     | 4479  | 4561  | 4643  | 4725  | 4807    | 4889  | 4971  | 5053  | 5135  |       |
| 03    | 5216     | 5298  | 5380  | 5462  | 5544  | 5626    | 5708  | 5790  | 5872  | 5954  |       |
| 04    | 6035     | 6117  | 6199  | 6281  | 6363  | 6445    | 6527  | 6609  | 6691  | 6773  |       |
| 05    | 6854     | 6936  | 7018  | 7100  | 7182  | 7264    | 7346  | 7428  | 7510  | 7592  |       |
| 06    | 7672     | 7754  | 7836  | 7918  | 8000  | 8082    | 8164  | 8246  | 8328  | 8410  |       |
| 07    | 8491     | 8573  | 8655  | 8737  | 8819  | 8901    | 8983  | 9065  | 9147  | 9229  |       |
| 08    | 9309     | 9391  | 9473  | 9555  | 9637  | 9719    | 9801  | 9883  | 9965  | 10000 |       |
| 09    | 725 0127 | 0209  | 0291  | 0373  | 0455  | 0537    | 0619  | 0701  | 0783  | 0865  |       |
| 5810  | 725 0945 | 1027  | 1109  | 1191  | 1273  | 1355    | 1437  | 1519  | 1601  | 1683  |       |
| 11    | 1765     | 1847  | 1929  | 2011  | 2093  | 2175    | 2257  | 2339  | 2421  | 2503  |       |
| 12    | 2584     | 2666  | 2748  | 2830  | 2912  | 2994    | 3076  | 3158  | 3240  | 3322  |       |
| 13    | 3398     | 3480  | 3562  | 3644  | 3726  | 3808    | 3890  | 3972  | 4054  | 4136  |       |
| 14    | 4216     | 4298  | 4380  | 4462  | 4544  | 4626    | 4708  | 4790  | 4872  | 4954  |       |
| 15    | 5033     | 5115  | 5197  | 5279  | 5361  | 5443    | 5525  | 5607  | 5689  | 5771  |       |
| 16    | 5850     | 5932  | 6014  | 6096  | 6178  | 6260    | 6342  | 6424  | 6506  | 6588  |       |
| 17    | 6667     | 6749  | 6831  | 6913  | 6995  | 7077    | 7159  | 7241  | 7323  | 7405  |       |
| 18    | 7483     | 7565  | 7647  | 7729  | 7811  | 7893    | 7975  | 8057  | 8139  | 8221  |       |
| 19    | 8300     | 8382  | 8464  | 8546  | 8628  | 8710    | 8792  | 8874  | 8956  | 9038  |       |
| 5820  | 725 9116 | 9198  | 9280  | 9362  | 9444  | 9526    | 9608  | 9690  | 9772  | 9854  |       |
| 21    | 9933     | 10015 | 10097 | 10179 | 10261 | 10343   | 10425 | 10507 | 10589 | 10671 |       |
| 22    | 726 0749 | 0831  | 0913  | 0995  | 1077  | 1159    | 1241  | 1323  | 1405  | 1487  |       |
| 23    | 1565     | 1647  | 1729  | 1811  | 1893  | 1975    | 2057  | 2139  | 2221  | 2303  |       |
| 24    | 2380     | 2462  | 2544  | 2626  | 2708  | 2790    | 2872  | 2954  | 3036  | 3118  |       |
| 25    | 3196     | 3278  | 3360  | 3442  | 3524  | 3606    | 3688  | 3770  | 3852  | 3934  |       |
| 26    | 4012     | 4094  | 4176  | 4258  | 4340  | 4422    | 4504  | 4586  | 4668  | 4750  |       |
| 27    | 4827     | 4909  | 4991  | 5073  | 5155  | 5237    | 5319  | 5401  | 5483  | 5565  |       |
| 28    | 5642     | 5724  | 5806  | 5888  | 5970  | 6052    | 6134  | 6216  | 6298  | 6380  |       |
| 29    | 6457     | 6539  | 6621  | 6703  | 6785  | 6867    | 6949  | 7031  | 7113  | 7195  |       |
| 5830  | 726 7272 | 7354  | 7436  | 7518  | 7600  | 7682    | 7764  | 7846  | 7928  | 8010  |       |
| 31    | 8087     | 8169  | 8251  | 8333  | 8415  | 8497    | 8579  | 8661  | 8743  | 8825  |       |
| 32    | 8901     | 8983  | 9065  | 9147  | 9229  | 9311    | 9393  | 9475  | 9557  | 9639  |       |
| 33    | 9716     | 9798  | 9880  | 9962  | 10044 | 10126   | 10208 | 10290 | 10372 | 10454 |       |
| 34    | 727 0530 | 0612  | 0694  | 0776  | 0858  | 0940    | 1022  | 1104  | 1186  | 1268  |       |
| 35    | 1344     | 1426  | 1508  | 1590  | 1672  | 1754    | 1836  | 1918  | 2000  | 2082  |       |
| 36    | 2158     | 2240  | 2322  | 2404  | 2486  | 2568    | 2650  | 2732  | 2814  | 2896  |       |
| 37    | 2972     | 3054  | 3136  | 3218  | 3300  | 3382    | 3464  | 3546  | 3628  | 3710  |       |
| 38    | 3786     | 3868  | 3950  | 4032  | 4114  | 4196    | 4278  | 4360  | 4442  | 4524  |       |
| 39    | 4599     | 4681  | 4763  | 4845  | 4927  | 5009    | 5091  | 5173  | 5255  | 5337  |       |
| 5840  | 727 5413 | 5495  | 5577  | 5659  | 5741  | 5823    | 5905  | 5987  | 6069  | 6151  |       |
| 41    | 6226     | 6308  | 6390  | 6472  | 6554  | 6636    | 6718  | 6800  | 6882  | 6964  |       |
| 42    | 7039     | 7121  | 7203  | 7285  | 7367  | 7449    | 7531  | 7613  | 7695  | 7777  |       |
| 43    | 7852     | 7934  | 8016  | 8098  | 8180  | 8262    | 8344  | 8426  | 8508  | 8590  |       |
| 44    | 8664     | 8746  | 8828  | 8910  | 8992  | 9074    | 9156  | 9238  | 9320  | 9402  |       |
| 45    | 9477     | 9559  | 9641  | 9723  | 9805  | 9887    | 9969  | 10051 | 10133 | 10215 |       |
| 46    | 728 0290 | 0372  | 0454  | 0536  | 0618  | 0700    | 0782  | 0864  | 0946  | 1028  |       |
| 47    | 1102     | 1184  | 1266  | 1348  | 1430  | 1512    | 1594  | 1676  | 1758  | 1840  |       |
| 48    | 1914     | 1996  | 2078  | 2160  | 2242  | 2324    | 2406  | 2488  | 2570  | 2652  |       |
| 49    | 2726     | 2808  | 2890  | 2972  | 3054  | 3136    | 3218  | 3300  | 3382  | 3464  |       |
| 5850  | 728 3538 | 3620  | 3702  | 3784  | 3866  | 3948    | 4030  | 4112  | 4194  | 4276  |       |
| N.    | 0        | 1     | 2     | 3     | 4     | 5       | 6     | 7     | 8     | 9     | P. P. |
| 53000 | 14 43 20 |       |       |       | 53000 | 1 28 20 |       |       |       |       |       |
| 53100 | 14 45 0  |       |       |       | 53100 | 1 28 30 |       |       |       |       |       |
| 53200 | 14 46 40 |       |       |       | 53200 | 1 28 40 |       |       |       |       |       |
| 53300 | 14 48 20 |       |       |       | 53300 | 1 28 50 |       |       |       |       |       |
| 53400 | 14 50 0  |       |       |       | 53400 | 1 29 0  |       |       |       |       |       |











| N.    | 0            | 1    | 2     | 3     | 4                  | 5        | 6     | 7       | 8     | 9     | P. P.  |
|-------|--------------|------|-------|-------|--------------------|----------|-------|---------|-------|-------|--------|
| 5450  | 736 3965     | 4045 | 4124  | 4204  | 4284               | 4363     | 4443  | 4523    | 4602  | 4682  |        |
| 51    | 4762         | 4841 | 4921  | 5001  | 5080               | 5160     | 5240  | 5319    | 5399  | 5479  |        |
| 52    | 5558         | 5638 | 5718  | 5797  | 5877               | 5957     | 6036  | 6116    | 6196  | 6275  |        |
| 53    | 6355         | 6435 | 6514  | 6594  | 6674               | 6753     | 6833  | 6912    | 6992  | 7072  |        |
| 54    | 7151         | 7231 | 7311  | 7390  | 7470               | 7549     | 7629  | 7709    | 7788  | 7868  |        |
| 55    | 7948         | 8027 | 8107  | 8186  | 8266               | 8346     | 8425  | 8505    | 8584  | 8664  |        |
| 56    | 8744         | 8823 | 8903  | 8982  | 9062               | 9142     | 9221  | 9301    | 9380  | 9460  |        |
| 57    | 9540         | 9619 | 9699  | 9778  | 9858               | 9937     | 10017 | 10097   | 10176 | 10256 |        |
| 58    | 737 0335     | 0415 | 0494  | 0574  | 0654               | 0733     | 0813  | 0892    | 0972  | 1051  |        |
| 59    | 1131         | 1210 | 1290  | 1370  | 1449               | 1529     | 1608  | 1688    | 1767  | 1847  |        |
| 5460  | 737 1926     | 2006 | 2086  | 2165  | 2245               | 2324     | 2404  | 2483    | 2563  | 2642  |        |
| 61    | 2722         | 2801 | 2881  | 2960  | 3040               | 3119     | 3199  | 3278    | 3358  | 3437  | 80     |
| 62    | 3517         | 3596 | 3676  | 3755  | 3835               | 3914     | 3994  | 4074    | 4153  | 4233  | 1 8.0  |
| 63    | 4312         | 4392 | 4471  | 4550  | 4630               | 4709     | 4789  | 4868    | 4948  | 5027  | 2 16.0 |
| 64    | 5107         | 5186 | 5266  | 5345  | 5425               | 5504     | 5584  | 5663    | 5743  | 5822  | 3 24.0 |
| 65    | 5902         | 5981 | 6061  | 6140  | 6220               | 6299     | 6378  | 6458    | 6537  | 6617  | 4 32.0 |
| 66    | 6696         | 6776 | 6855  | 6935  | 7014               | 7094     | 7173  | 7252    | 7332  | 7411  | 5 40.0 |
| 67    | 7491         | 7570 | 7650  | 7729  | 7808               | 7888     | 7967  | 8047    | 8126  | 8206  | 6 48.0 |
| 68    | 8285         | 8364 | 8444  | 8523  | 8603               | 8682     | 8762  | 8841    | 8920  | 9000  | 7 56.0 |
| 69    | 9079         | 9159 | 9238  | 9317  | 9397               | 9476     | 9556  | 9635    | 9714  | 9794  | 8 64.0 |
| 5470  | 737 9873     | 9953 | 10032 | 10111 | 10191              | 10270    | 10350 | 10429   | 10508 | 10588 | 9 72.0 |
| 71    | 738 0667     | 0747 | 0826  | 0905  | 0985               | 1064     | 1143  | 1223    | 1302  | 1382  |        |
| 72    | 1461         | 1540 | 1620  | 1699  | 1778               | 1858     | 1937  | 2016    | 2096  | 2175  |        |
| 73    | 2254         | 2334 | 2413  | 2493  | 2572               | 2651     | 2731  | 2810    | 2889  | 2969  |        |
| 74    | 3048         | 3127 | 3207  | 3286  | 3365               | 3445     | 3524  | 3603    | 3683  | 3762  |        |
| 75    | 3841         | 3921 | 4000  | 4079  | 4159               | 4238     | 4317  | 4396    | 4476  | 4555  |        |
| 76    | 4634         | 4714 | 4793  | 4872  | 4952               | 5031     | 5110  | 5190    | 5269  | 5348  |        |
| 77    | 5427         | 5507 | 5586  | 5665  | 5745               | 5824     | 5903  | 5982    | 6062  | 6141  |        |
| 78    | 6220         | 6300 | 6379  | 6458  | 6537               | 6617     | 6696  | 6775    | 6854  | 6934  |        |
| 79    | 7013         | 7092 | 7172  | 7251  | 7330               | 7409     | 7489  | 7568    | 7647  | 7726  |        |
| 5480  | 738 7806     | 7885 | 7964  | 8043  | 8123               | 8202     | 8281  | 8360    | 8440  | 8519  |        |
| 81    | 8598         | 8677 | 8756  | 8836  | 8915               | 8994     | 9073  | 9153    | 9232  | 9311  | 79     |
| 82    | 9390         | 9470 | 9549  | 9628  | 9707               | 9786     | 9866  | 9945    | 10024 | 10103 | 1 7.9  |
| 83    | 739 0182     | 0262 | 0341  | 0420  | 0499               | 0578     | 0658  | 0737    | 0816  | 0895  | 2 15.8 |
| 84    | 0974         | 1054 | 1133  | 1212  | 1291               | 1370     | 1450  | 1529    | 1608  | 1687  | 3 23.7 |
| 85    | 1766         | 1845 | 1925  | 2004  | 2083               | 2162     | 2241  | 2321    | 2400  | 2479  | 4 31.6 |
| 86    | 2558         | 2637 | 2716  | 2796  | 2875               | 2954     | 3033  | 3112    | 3191  | 3270  | 5 39.5 |
| 87    | 3350         | 3429 | 3508  | 3587  | 3666               | 3745     | 3824  | 3904    | 3983  | 4062  | 6 47.4 |
| 88    | 4141         | 4220 | 4299  | 4378  | 4458               | 4537     | 4616  | 4695    | 4774  | 4853  | 7 55.3 |
| 89    | 4932         | 5011 | 5091  | 5170  | 5249               | 5328     | 5407  | 5486    | 5565  | 5644  | 8 63.2 |
| 5490  | 739 5723     | 5803 | 5882  | 5961  | 6040               | 6119     | 6198  | 6277    | 6356  | 6435  | 9 71.1 |
| 91    | 6514         | 6594 | 6673  | 6752  | 6831               | 6910     | 6989  | 7068    | 7147  | 7226  |        |
| 92    | 7305         | 7384 | 7463  | 7543  | 7622               | 7701     | 7780  | 7859    | 7938  | 8017  |        |
| 93    | 8096         | 8175 | 8254  | 8333  | 8412               | 8491     | 8570  | 8649    | 8728  | 8808  |        |
| 94    | 8887         | 8966 | 9045  | 9124  | 9203               | 9282     | 9361  | 9440    | 9519  | 9598  |        |
| 95    | 9677         | 9756 | 9835  | 9914  | 9993               | 10072    | 10151 | 10230   | 10309 | 10388 |        |
| 96    | 740 0467     | 0546 | 0625  | 0704  | 0783               | 0862     | 0941  | 1020    | 1099  | 1178  |        |
| 97    | 1257         | 1336 | 1415  | 1494  | 1573               | 1652     | 1731  | 1810    | 1889  | 1968  |        |
| 98    | 2047         | 2126 | 2205  | 2284  | 2363               | 2442     | 2521  | 2600    | 2679  | 2758  |        |
| 99    | 2837         | 2916 | 2995  | 3074  | 3153               | 3232     | 3311  | 3390    | 3469  | 3548  |        |
| 5500  | 740 3627     | 3706 | 3785  | 3864  | 3943               | 4022     | 4101  | 4180    | 4259  | 4338  |        |
| N.    | 0            | 1    | 2     | 3     | 4                  | 5        | 6     | 7       | 8     | 9     | P. P.  |
| 54500 | = 15° 8' 20" |      |       |       | 5450° = 1° 30' 50" | S. 4.685 | 5243  | T. 6759 |       |       |        |
| 54600 | = 15 10 0    |      |       |       | 5460° = 1 31 0     |          | 5241  | 6763    |       |       |        |
| 54700 | = 15 11 40   |      |       |       | 5470° = 1 31 10    |          | 5240  | 6767    |       |       |        |
| 54800 | = 15 13 20   |      |       |       | 5480° = 1 31 20    |          | 5238  | 6771    |       |       |        |
| 54900 | = 15 15 0    |      |       |       | 5490° = 1 31 30    |          | 5236  | 6774    |       |       |        |



| N.    | 0        | 1           | 2    | 3     | 4    | 5    | 6       | 7       | 8    | 9        | P. P. |
|-------|----------|-------------|------|-------|------|------|---------|---------|------|----------|-------|
| 5500  | 740 3627 | 3706        | 3785 | 3864  | 3943 | 4022 | 4101    | 4180    | 4259 | 4338     |       |
| 01    | 4416     | 4495        | 4574 | 4653  | 4732 | 4811 | 4890    | 4969    | 5048 | 5127     |       |
| 02    | 5206     | 5285        | 5364 | 5443  | 5522 | 5601 | 5680    | 5759    | 5838 | 5917     |       |
| 03    | 5995     | 6074        | 6153 | 6232  | 6311 | 6390 | 6469    | 6548    | 6627 | 6706     |       |
| 04    | 6784     | 6863        | 6942 | 7021  | 7100 | 7179 | 7258    | 7337    | 7416 | 7495     |       |
| 05    | 7573     | 7652        | 7731 | 7810  | 7889 | 7968 | 8047    | 8126    | 8205 | 8284     |       |
| 06    | 8362     | 8441        | 8520 | 8599  | 8678 | 8757 | 8836    | 8915    | 8994 | 9073     |       |
| 07    | 9151     | 9230        | 9309 | 9388  | 9467 | 9546 | 9625    | 9704    | 9783 | 9862     |       |
| 08    | 9939     | 0018        | 0097 | 0176  | 0255 | 0334 | 0413    | 0492    | 0571 | 0650     |       |
| 09    | 741 0728 | 0807        | 0885 | 0964  | 1043 | 1122 | 1201    | 1280    | 1359 | 1438     |       |
| 5510  | 741 1516 | 1595        | 1674 | 1753  | 1832 | 1911 | 1990    | 2069    | 2148 | 2227     |       |
| 11    | 2304     | 2383        | 2462 | 2541  | 2620 | 2699 | 2778    | 2857    | 2936 | 3015     |       |
| 12    | 3192     | 3271        | 3350 | 3429  | 3508 | 3587 | 3666    | 3745    | 3824 | 3903     |       |
| 13    | 3980     | 4059        | 4138 | 4217  | 4296 | 4375 | 4454    | 4533    | 4612 | 4691     |       |
| 14    | 4668     | 4746        | 4825 | 4904  | 4983 | 5062 | 5141    | 5220    | 5299 | 5378     |       |
| 15    | 5455     | 5534        | 5613 | 5692  | 5771 | 5850 | 5929    | 6008    | 6087 | 6166     |       |
| 16    | 6243     | 6322        | 6401 | 6480  | 6559 | 6638 | 6717    | 6796    | 6875 | 6954     |       |
| 17    | 7030     | 7109        | 7188 | 7267  | 7346 | 7425 | 7504    | 7583    | 7662 | 7741     |       |
| 18    | 7817     | 7896        | 7975 | 8054  | 8133 | 8212 | 8291    | 8370    | 8449 | 8528     |       |
| 19    | 8604     | 8683        | 8762 | 8841  | 8920 | 9000 | 9079    | 9158    | 9237 | 9316     |       |
| 5520  | 741 9391 | 9469        | 9548 | 9627  | 9706 | 9785 | 9864    | 9943    | 0022 | 0101     |       |
| 21    | 742 0177 | 0256        | 0335 | 0414  | 0493 | 0572 | 0651    | 0730    | 0809 | 0888     |       |
| 22    | 0966     | 1045        | 1124 | 1203  | 1282 | 1361 | 1440    | 1519    | 1598 | 1677     |       |
| 23    | 1750     | 1829        | 1908 | 1987  | 2066 | 2145 | 2224    | 2303    | 2382 | 2461     |       |
| 24    | 2537     | 2616        | 2695 | 2774  | 2853 | 2932 | 3011    | 3090    | 3169 | 3248     |       |
| 25    | 3323     | 3402        | 3481 | 3560  | 3639 | 3718 | 3797    | 3876    | 3955 | 4034     |       |
| 26    | 4109     | 4188        | 4267 | 4346  | 4425 | 4504 | 4583    | 4662    | 4741 | 4820     |       |
| 27    | 4895     | 4973        | 5052 | 5130  | 5209 | 5288 | 5366    | 5445    | 5524 | 5603     |       |
| 28    | 5680     | 5759        | 5837 | 5916  | 5995 | 6074 | 6153    | 6232    | 6311 | 6390     |       |
| 29    | 6466     | 6544        | 6623 | 6702  | 6780 | 6859 | 6938    | 7017    | 7096 | 7175     |       |
| 5530  | 742 7251 | 7330        | 7408 | 7487  | 7566 | 7645 | 7724    | 7803    | 7882 | 7961     |       |
| 31    | 8037     | 8115        | 8194 | 8273  | 8352 | 8431 | 8510    | 8589    | 8668 | 8747     |       |
| 32    | 8827     | 8905        | 8984 | 9063  | 9142 | 9221 | 9300    | 9379    | 9458 | 9537     |       |
| 33    | 9607     | 9685        | 9764 | 9843  | 9922 | 0001 | 0080    | 0159    | 0238 | 0317     |       |
| 34    | 743 0392 | 0470        | 0549 | 0628  | 0707 | 0786 | 0865    | 0944    | 1023 | 1102     |       |
| 35    | 1176     | 1255        | 1333 | 1412  | 1490 | 1569 | 1648    | 1727    | 1806 | 1885     |       |
| 36    | 1967     | 2039        | 2118 | 2196  | 2275 | 2354 | 2433    | 2512    | 2591 | 2670     |       |
| 37    | 2745     | 2824        | 2902 | 2981  | 3059 | 3138 | 3217    | 3296    | 3375 | 3454     |       |
| 38    | 3530     | 3608        | 3686 | 3765  | 3843 | 3922 | 4001    | 4080    | 4159 | 4238     |       |
| 39    | 4314     | 4392        | 4470 | 4549  | 4628 | 4706 | 4785    | 4864    | 4943 | 5022     |       |
| 5540  | 743 5098 | 5176        | 5254 | 5333  | 5411 | 5490 | 5568    | 5647    | 5726 | 5805     |       |
| 41    | 5884     | 5960        | 6038 | 6117  | 6195 | 6274 | 6353    | 6432    | 6511 | 6590     |       |
| 42    | 6665     | 6744        | 6822 | 6900  | 6979 | 7058 | 7137    | 7216    | 7295 | 7374     |       |
| 43    | 7449     | 7527        | 7605 | 7684  | 7762 | 7841 | 7920    | 7999    | 8078 | 8157     |       |
| 44    | 8232     | 8311        | 8389 | 8467  | 8546 | 8625 | 8704    | 8783    | 8862 | 8941     |       |
| 45    | 9016     | 9094        | 9172 | 9250  | 9329 | 9408 | 9487    | 9566    | 9645 | 9724     |       |
| 46    | 9799     | 9877        | 9955 | 0034  | 0112 | 0190 | 0269    | 0348    | 0427 | 0506     |       |
| 47    | 744 0582 | 0660        | 0738 | 0817  | 0895 | 0973 | 1052    | 1131    | 1210 | 1289     |       |
| 48    | 1365     | 1443        | 1521 | 1599  | 1678 | 1756 | 1835    | 1914    | 1993 | 2072     |       |
| 49    | 2147     | 2226        | 2304 | 2382  | 2460 | 2539 | 2617    | 2696    | 2775 | 2854     |       |
| 5550  | 744 2930 | 3008        | 3086 | 3165  | 3243 | 3321 | 3399    | 3478    | 3557 | 3636     |       |
| N.    | 0        | 1           | 2    | 3     | 4    | 5    | 6       | 7       | 8    | 9        | P. P. |
| 55000 | =        | 15° 16' 40" |      | 3500' | =    | 1°   | 31' 40" | H. 4.68 | 5334 | T. 67728 |       |
| 55100 | =        | 15 18 20    |      | 5510' | =    | 1    | 31 30   |         | 5334 | 67728    |       |
| 55200 | =        | 15 20 0     |      | 5520' | =    | 1    | 32 0    |         | 5335 | 67730    |       |
| 55300 | =        | 15 21 40    |      | 5530' | =    | 1    | 32 10   |         | 5335 | 67730    |       |
| 55400 | =        | 15 23 20    |      | 5540' | =    | 1    | 32 20   |         | 5336 | 67731    |       |



| N.    | 0        | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     | P. P. |
|-------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 5550  | 244 2930 | 3008  | 3086  | 3165  | 3243  | 3321  | 3399  | 3478  | 3556  | 3635  |       |
| 51    | 3712     | 3791  | 3869  | 3947  | 4025  | 4103  | 4182  | 4260  | 4338  | 4416  |       |
| 52    | 4495     | 4573  | 4651  | 4729  | 4807  | 4886  | 4964  | 5042  | 5120  | 5199  |       |
| 53    | 5277     | 5355  | 5433  | 5511  | 5590  | 5668  | 5746  | 5824  | 5902  | 5981  |       |
| 54    | 6059     | 6137  | 6215  | 6293  | 6372  | 6450  | 6528  | 6606  | 6684  | 6762  |       |
| 55    | 6841     | 6919  | 6997  | 7075  | 7153  | 7232  | 7310  | 7388  | 7466  | 7544  |       |
| 56    | 7622     | 7700  | 7779  | 7857  | 7935  | 8013  | 8091  | 8170  | 8248  | 8326  |       |
| 57    | 8404     | 8482  | 8560  | 8638  | 8717  | 8795  | 8873  | 8951  | 9029  | 9107  |       |
| 58    | 9185     | 9263  | 9341  | 9419  | 9498  | 9576  | 9654  | 9732  | 9810  | 9889  |       |
| 59    | 9967     | 10045 | 10123 | 10201 | 10279 | 10357 | 10435 | 10513 | 10592 | 10670 |       |
| 5560  | 245 0748 | 0826  | 0904  | 0982  | 1060  | 1138  | 1217  | 1295  | 1373  | 1451  | 70    |
| 61    | 1529     | 1607  | 1685  | 1763  | 1841  | 1919  | 1998  | 2076  | 2154  | 2232  | 71    |
| 62    | 2310     | 2388  | 2466  | 2544  | 2622  | 2700  | 2778  | 2856  | 2934  | 3012  | 72    |
| 63    | 3091     | 3169  | 3247  | 3325  | 3403  | 3481  | 3559  | 3637  | 3715  | 3793  | 73    |
| 64    | 3874     | 3952  | 4030  | 4108  | 4186  | 4264  | 4342  | 4420  | 4498  | 4576  | 74    |
| 65    | 4658     | 4736  | 4814  | 4892  | 4970  | 5048  | 5126  | 5204  | 5282  | 5360  | 75    |
| 66    | 5443     | 5521  | 5599  | 5677  | 5755  | 5833  | 5911  | 5989  | 6067  | 6145  | 76    |
| 67    | 6323     | 6401  | 6479  | 6557  | 6635  | 6713  | 6791  | 6869  | 6947  | 7025  | 77    |
| 68    | 7094     | 7172  | 7250  | 7328  | 7406  | 7484  | 7562  | 7640  | 7718  | 7796  | 78    |
| 69    | 7874     | 7952  | 8030  | 8108  | 8186  | 8264  | 8342  | 8420  | 8498  | 8576  | 79    |
| 5570  | 245 0852 | 0930  | 1008  | 1086  | 1164  | 1242  | 1320  | 1398  | 1476  | 1554  |       |
| 71    | 1632     | 1710  | 1788  | 1866  | 1944  | 2022  | 2100  | 2178  | 2256  | 2334  |       |
| 72    | 2410     | 2488  | 2566  | 2644  | 2722  | 2800  | 2878  | 2956  | 3034  | 3112  |       |
| 73    | 3190     | 3268  | 3346  | 3424  | 3502  | 3580  | 3658  | 3736  | 3814  | 3892  |       |
| 74    | 3970     | 4048  | 4126  | 4204  | 4282  | 4360  | 4438  | 4516  | 4594  | 4672  |       |
| 75    | 4750     | 4828  | 4906  | 4984  | 5062  | 5140  | 5218  | 5296  | 5374  | 5452  |       |
| 76    | 5530     | 5608  | 5686  | 5764  | 5842  | 5920  | 5998  | 6076  | 6154  | 6232  |       |
| 77    | 6410     | 6488  | 6566  | 6644  | 6722  | 6800  | 6878  | 6956  | 7034  | 7112  |       |
| 78    | 7290     | 7368  | 7446  | 7524  | 7602  | 7680  | 7758  | 7836  | 7914  | 7992  |       |
| 79    | 8170     | 8248  | 8326  | 8404  | 8482  | 8560  | 8638  | 8716  | 8794  | 8872  |       |
| 5580  | 245 0956 | 1034  | 1112  | 1190  | 1268  | 1346  | 1424  | 1502  | 1580  | 1658  | 77    |
| 81    | 1736     | 1814  | 1892  | 1970  | 2048  | 2126  | 2204  | 2282  | 2360  | 2438  | 78    |
| 82    | 2516     | 2594  | 2672  | 2750  | 2828  | 2906  | 2984  | 3062  | 3140  | 3218  | 79    |
| 83    | 3298     | 3376  | 3454  | 3532  | 3610  | 3688  | 3766  | 3844  | 3922  | 4000  |       |
| 84    | 4078     | 4156  | 4234  | 4312  | 4390  | 4468  | 4546  | 4624  | 4702  | 4780  |       |
| 85    | 4858     | 4936  | 5014  | 5092  | 5170  | 5248  | 5326  | 5404  | 5482  | 5560  |       |
| 86    | 5638     | 5716  | 5794  | 5872  | 5950  | 6028  | 6106  | 6184  | 6262  | 6340  |       |
| 87    | 6418     | 6496  | 6574  | 6652  | 6730  | 6808  | 6886  | 6964  | 7042  | 7120  |       |
| 88    | 7200     | 7278  | 7356  | 7434  | 7512  | 7590  | 7668  | 7746  | 7824  | 7902  |       |
| 89    | 8082     | 8160  | 8238  | 8316  | 8394  | 8472  | 8550  | 8628  | 8706  | 8784  |       |
| 5590  | 245 1118 | 1196  | 1274  | 1352  | 1430  | 1508  | 1586  | 1664  | 1742  | 1820  |       |
| 91    | 1898     | 1976  | 2054  | 2132  | 2210  | 2288  | 2366  | 2444  | 2522  | 2600  |       |
| 92    | 2678     | 2756  | 2834  | 2912  | 2990  | 3068  | 3146  | 3224  | 3302  | 3380  |       |
| 93    | 3458     | 3536  | 3614  | 3692  | 3770  | 3848  | 3926  | 4004  | 4082  | 4160  |       |
| 94    | 4230     | 4308  | 4386  | 4464  | 4542  | 4620  | 4698  | 4776  | 4854  | 4932  |       |
| 95    | 5002     | 5080  | 5158  | 5236  | 5314  | 5392  | 5470  | 5548  | 5626  | 5704  |       |
| 96    | 5776     | 5854  | 5932  | 6010  | 6088  | 6166  | 6244  | 6322  | 6400  | 6478  |       |
| 97    | 6548     | 6626  | 6704  | 6782  | 6860  | 6938  | 7016  | 7094  | 7172  | 7250  |       |
| 98    | 7318     | 7396  | 7474  | 7552  | 7630  | 7708  | 7786  | 7864  | 7942  | 8020  |       |
| 99    | 8098     | 8176  | 8254  | 8332  | 8410  | 8488  | 8566  | 8644  | 8722  | 8800  |       |
| 5600  | 245 1280 | 1358  | 1436  | 1514  | 1592  | 1670  | 1748  | 1826  | 1904  | 1982  |       |
| N.    | 0        | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     | P. P. |
| 55500 | 15       | 25    | 67    | 55500 | 15    | 30    | 55500 | 15    | 45    | 55500 | 15    |
| 55500 | 15       | 30    | 40    | 55500 | 15    | 45    | 55500 | 15    | 60    | 55500 | 15    |
| 55500 | 15       | 30    | 50    | 55500 | 15    | 45    | 55500 | 15    | 60    | 55500 | 15    |
| 55500 | 15       | 30    | 50    | 55500 | 15    | 45    | 55500 | 15    | 60    | 55500 | 15    |
| 55500 | 15       | 30    | 40    | 55500 | 15    | 45    | 55500 | 15    | 60    | 55500 | 15    |



| N.    | 0           | 1    | 2    | 3    | 4     | 5           | 6     | 7           | 8     | 9           | I' P. |
|-------|-------------|------|------|------|-------|-------------|-------|-------------|-------|-------------|-------|
| 5600  | 748 1880    | 1958 | 2035 | 2113 | 2191  | 2269        | 2347  | 2425        | 2503  | 2581        |       |
| 01    | 2656        | 2733 | 2811 | 2888 | 2966  | 3043        | 3121  | 3199        | 3276  | 3354        |       |
| 02    | 3431        | 3509 | 3586 | 3663 | 3741  | 3819        | 3896  | 3974        | 4052  | 4129        |       |
| 03    | 4206        | 4284 | 4361 | 4439 | 4516  | 4594        | 4672  | 4749        | 4827  | 4905        |       |
| 04    | 4981        | 5059 | 5136 | 5213 | 5291  | 5369        | 5446  | 5524        | 5602  | 5679        |       |
| 05    | 5756        | 5834 | 5911 | 5989 | 6066  | 6144        | 6222  | 6299        | 6377  | 6454        |       |
| 06    | 6531        | 6608 | 6686 | 6763 | 6841  | 6919        | 6996  | 7074        | 7152  | 7229        |       |
| 07    | 7306        | 7384 | 7461 | 7539 | 7616  | 7694        | 7772  | 7849        | 7927  | 8004        |       |
| 08    | 8080        | 8157 | 8235 | 8312 | 8390  | 8468        | 8545  | 8623        | 8701  | 8778        |       |
| 09    | 8854        | 8932 | 9009 | 9087 | 9164  | 9242        | 9319  | 9397        | 9474  | 9552        |       |
| 5610  | 748 9629    | 9706 | 9783 | 9861 | 9938  | 10016       | 10094 | 10171       | 10249 | 10326       |       |
| 11    | 749 0403    | 0480 | 0557 | 0635 | 0712  | 0790        | 0867  | 0945        | 1022  | 1100        | 74    |
| 12    | 1177        | 1254 | 1331 | 1409 | 1486  | 1564        | 1641  | 1719        | 1796  | 1874        | 1     |
| 13    | 1950        | 2028 | 2105 | 2183 | 2260  | 2338        | 2415  | 2493        | 2570  | 2648        | 2     |
| 14    | 2724        | 2801 | 2879 | 2956 | 3034  | 3111        | 3189  | 3266        | 3344  | 3421        | 3     |
| 15    | 3498        | 3575 | 3652 | 3730 | 3807  | 3885        | 3962  | 4040        | 4117  | 4195        | 4     |
| 16    | 4271        | 4348 | 4426 | 4503 | 4581  | 4658        | 4736  | 4813        | 4891  | 4968        | 5     |
| 17    | 5044        | 5122 | 5199 | 5276 | 5354  | 5431        | 5509  | 5586        | 5664  | 5741        | 6     |
| 18    | 5817        | 5895 | 5972 | 6050 | 6127  | 6205        | 6282  | 6360        | 6437  | 6515        | 7     |
| 19    | 6590        | 6668 | 6745 | 6823 | 6900  | 6978        | 7055  | 7133        | 7210  | 7288        | 8     |
| 5620  | 749 7361    | 7440 | 7518 | 7595 | 7673  | 7750        | 7828  | 7905        | 7983  | 8060        |       |
| 21    | 8136        | 8213 | 8291 | 8368 | 8445  | 8523        | 8600  | 8678        | 8755  | 8833        |       |
| 22    | 8908        | 8986 | 9063 | 9141 | 9217  | 9295        | 9372  | 9450        | 9527  | 9605        |       |
| 23    | 9681        | 9758 | 9835 | 9913 | 9990  | 10068       | 10145 | 10223       | 10300 | 10378       |       |
| 24    | 750 0453    | 0530 | 0608 | 0685 | 0763  | 0840        | 0918  | 0995        | 1073  | 1150        |       |
| 25    | 1225        | 1302 | 1380 | 1457 | 1534  | 1612        | 1689  | 1767        | 1844  | 1922        |       |
| 26    | 1997        | 2074 | 2152 | 2229 | 2306  | 2384        | 2461  | 2539        | 2616  | 2694        |       |
| 27    | 2769        | 2846 | 2924 | 3001 | 3079  | 3156        | 3234  | 3311        | 3389  | 3466        |       |
| 28    | 3541        | 3618 | 3695 | 3773 | 3850  | 3928        | 4005  | 4083        | 4160  | 4238        |       |
| 29    | 4312        | 4390 | 4467 | 4544 | 4622  | 4699        | 4777  | 4854        | 4932  | 5009        |       |
| 5630  | 750 5084    | 5161 | 5238 | 5315 | 5393  | 5470        | 5548  | 5625        | 5703  | 5780        |       |
| 31    | 5855        | 5932 | 6010 | 6087 | 6164  | 6242        | 6319  | 6397        | 6474  | 6552        |       |
| 32    | 6626        | 6704 | 6781 | 6859 | 6936  | 7014        | 7091  | 7169        | 7246  | 7324        |       |
| 33    | 7398        | 7475 | 7552 | 7630 | 7707  | 7785        | 7862  | 7940        | 8017  | 8095        |       |
| 34    | 8168        | 8246 | 8323 | 8401 | 8478  | 8556        | 8633  | 8711        | 8788  | 8866        |       |
| 35    | 8939        | 9016 | 9093 | 9171 | 9248  | 9326        | 9403  | 9481        | 9558  | 9636        |       |
| 36    | 9710        | 9787 | 9864 | 9942 | 10019 | 10097       | 10174 | 10252       | 10329 | 10407       |       |
| 37    | 751 0480    | 0557 | 0634 | 0712 | 0789  | 0866        | 0944  | 1021        | 1099  | 1176        |       |
| 38    | 1251        | 1328 | 1405 | 1483 | 1560  | 1638        | 1715  | 1793        | 1870  | 1948        |       |
| 39    | 2021        | 2098 | 2175 | 2253 | 2330  | 2408        | 2485  | 2563        | 2640  | 2718        |       |
| 5640  | 751 4791    | 4868 | 4945 | 5023 | 5100  | 5178        | 5255  | 5333        | 5410  | 5488        |       |
| 41    | 5561        | 5638 | 5715 | 5793 | 5870  | 5948        | 6025  | 6103        | 6180  | 6258        |       |
| 42    | 4331        | 4408 | 4485 | 4563 | 4640  | 4718        | 4795  | 4873        | 4950  | 5028        |       |
| 43    | 5101        | 5177 | 5254 | 5331 | 5409  | 5486        | 5564  | 5641        | 5719  | 5796        |       |
| 44    | 5870        | 5947 | 6024 | 6101 | 6179  | 6256        | 6334  | 6411        | 6489  | 6566        |       |
| 45    | 6639        | 6716 | 6793 | 6870 | 6948  | 7025        | 7103  | 7180        | 7258  | 7335        |       |
| 46    | 7409        | 7486 | 7563 | 7641 | 7718  | 7795        | 7873  | 7950        | 8028  | 8105        |       |
| 47    | 8178        | 8255 | 8332 | 8410 | 8487  | 8565        | 8642  | 8720        | 8797  | 8875        |       |
| 48    | 8947        | 9024 | 9101 | 9179 | 9256  | 9334        | 9411  | 9489        | 9566  | 9644        |       |
| 49    | 9716        | 9793 | 9870 | 9948 | 10025 | 10103       | 10180 | 10258       | 10335 | 10413       |       |
| 5650  | 752 0484    | 0561 | 0638 | 0715 | 0793  | 0870        | 0948  | 1025        | 1103  | 1180        |       |
| N.    | 0           | 1    | 2    | 3    | 4     | 5           | 6     | 7           | 8     | 9           | I' P. |
| 56000 | 15° 33' 20" |      |      |      | 56000 | 15° 33' 20" | 56000 | 15° 33' 20" | 56000 | 15° 33' 20" |       |
| 56100 | 15 35 0     |      |      |      | 56100 | 15 35 0     | 56100 | 15 35 0     | 56100 | 15 35 0     |       |
| 56200 | 15 36 40    |      |      |      | 56200 | 15 36 40    | 56200 | 15 36 40    | 56200 | 15 36 40    |       |
| 56300 | 15 38 20    |      |      |      | 56300 | 15 38 20    | 56300 | 15 38 20    | 56300 | 15 38 20    |       |
| 56400 | 15 40 0     |      |      |      | 56400 | 15 40 0     | 56400 | 15 40 0     | 56400 | 15 40 0     |       |



| N.    | 0             | 1    | 2    | 3    | 4     | 5            | 6    | 7    | 8    | 9        | P. P.        |
|-------|---------------|------|------|------|-------|--------------|------|------|------|----------|--------------|
| 5650  | 752 0484      | 0561 | 0638 | 0715 | 0792  | 0869         | 0946 | 1023 | 1099 | 1176     |              |
| 51    | 1253          | 1330 | 1407 | 1484 | 1560  | 1637         | 1714 | 1791 | 1868 | 1945     |              |
| 52    | 2022          | 2098 | 2175 | 2252 | 2329  | 2406         | 2483 | 2559 | 2636 | 2713     |              |
| 53    | 2790          | 2867 | 2944 | 3020 | 3097  | 3174         | 3251 | 3328 | 3404 | 3481     |              |
| 54    | 3558          | 3635 | 3712 | 3788 | 3865  | 3942         | 4019 | 4096 | 4172 | 4249     |              |
| 55    | 4326          | 4403 | 4480 | 4556 | 4633  | 4710         | 4787 | 4864 | 4940 | 5017     |              |
| 56    | 5094          | 5171 | 5248 | 5324 | 5401  | 5478         | 5555 | 5631 | 5708 | 5785     |              |
| 57    | 5862          | 5939 | 6015 | 6092 | 6169  | 6246         | 6322 | 6399 | 6476 | 6553     |              |
| 58    | 6629          | 6706 | 6783 | 6860 | 6936  | 7013         | 7090 | 7167 | 7243 | 7320     |              |
| 59    | 7397          | 7474 | 7550 | 7627 | 7704  | 7781         | 7857 | 7934 | 8011 | 8088     |              |
| 5660  | 752 8164      | 8241 | 8318 | 8394 | 8471  | 8548         | 8625 | 8701 | 8778 | 8855     |              |
| 61    | 8932          | 9008 | 9085 | 9162 | 9238  | 9315         | 9392 | 9469 | 9545 | 9622     | 77           |
| 62    | 9699          | 9775 | 9852 | 9929 | 0005  | 0082         | 0159 | 0236 | 0312 | 0389     | 1 7.7        |
| 63    | 753 0466      | 0542 | 0619 | 0696 | 0772  | 0849         | 0926 | 1002 | 1079 | 1156     | 2 15.4       |
| 64    | 1232          | 1309 | 1386 | 1462 | 1539  | 1616         | 1692 | 1769 | 1846 | 1922     | 3 23.1       |
| 65    | 1999          | 2076 | 2152 | 2229 | 2306  | 2382         | 2459 | 2536 | 2612 | 2689     | 4 30.8       |
| 66    | 2766          | 2842 | 2919 | 2996 | 3072  | 3149         | 3226 | 3302 | 3379 | 3455     | 5 38.5       |
| 67    | 3532          | 3609 | 3685 | 3762 | 3839  | 3915         | 3992 | 4069 | 4145 | 4222     | 6 46.2       |
| 68    | 4298          | 4375 | 4452 | 4528 | 4605  | 4682         | 4758 | 4835 | 4911 | 4988     | 7 53.9       |
| 69    | 5065          | 5141 | 5218 | 5294 | 5371  | 5448         | 5524 | 5601 | 5677 | 5754     | 8 61.6       |
| 5670  | 753 5831      | 5907 | 5984 | 6060 | 6137  | 6214         | 6290 | 6367 | 6443 | 6520     | 9 69.3       |
| 71    | 6596          | 6673 | 6750 | 6826 | 6903  | 6979         | 7056 | 7133 | 7209 | 7286     |              |
| 72    | 7362          | 7439 | 7515 | 7592 | 7668  | 7745         | 7822 | 7898 | 7975 | 8051     |              |
| 73    | 8128          | 8204 | 8281 | 8357 | 8434  | 8511         | 8587 | 8664 | 8740 | 8817     |              |
| 74    | 8893          | 8970 | 9046 | 9123 | 9199  | 9276         | 9353 | 9429 | 9506 | 9582     |              |
| 75    | 9659          | 9735 | 9812 | 9888 | 9965  | 0041         | 0118 | 0194 | 0271 | 0347     |              |
| 76    | 754 0424      | 0500 | 0577 | 0653 | 0730  | 0806         | 0883 | 0959 | 1036 | 1112     |              |
| 77    | 1189          | 1265 | 1342 | 1418 | 1495  | 1571         | 1648 | 1724 | 1801 | 1877     |              |
| 78    | 1954          | 2030 | 2107 | 2183 | 2260  | 2336         | 2413 | 2489 | 2566 | 2642     |              |
| 79    | 2719          | 2795 | 2872 | 2948 | 3025  | 3101         | 3178 | 3254 | 3330 | 3407     |              |
| 5680  | 754 3483      | 3560 | 3636 | 3713 | 3789  | 3866         | 3942 | 4019 | 4095 | 4171     |              |
| 81    | 4248          | 4324 | 4401 | 4477 | 4554  | 4630         | 4707 | 4783 | 4859 | 4936     | 76           |
| 82    | 5012          | 5089 | 5165 | 5242 | 5318  | 5394         | 5471 | 5547 | 5624 | 5700     | 1 7.6        |
| 83    | 5777          | 5853 | 5929 | 6006 | 6082  | 6159         | 6235 | 6311 | 6388 | 6464     | 2 15.2       |
| 84    | 6541          | 6617 | 6694 | 6770 | 6846  | 6923         | 6999 | 7076 | 7152 | 7228     | 3 22.8       |
| 85    | 7305          | 7381 | 7457 | 7534 | 7610  | 7687         | 7763 | 7839 | 7916 | 7992     | 4 30.4       |
| 86    | 8069          | 8145 | 8221 | 8298 | 8374  | 8450         | 8527 | 8603 | 8680 | 8756     | 5 38.0       |
| 87    | 8832          | 8909 | 8985 | 9061 | 9138  | 9214         | 9290 | 9367 | 9443 | 9520     | 6 45.6       |
| 88    | 9596          | 9672 | 9749 | 9825 | 9901  | 9978         | 0054 | 0130 | 0207 | 0283     | 7 53.2       |
| 89    | 755 0359      | 0436 | 0512 | 0588 | 0665  | 0741         | 0817 | 0894 | 0970 | 1046     | 8 60.8       |
| 5690  | 755 1123      | 1199 | 1275 | 1352 | 1428  | 1504         | 1581 | 1657 | 1733 | 1810     | 9 68.4       |
| 91    | 1886          | 1962 | 2038 | 2115 | 2191  | 2267         | 2344 | 2420 | 2496 | 2573     |              |
| 92    | 2649          | 2725 | 2802 | 2878 | 2954  | 3030         | 3107 | 3183 | 3259 | 3336     |              |
| 93    | 3412          | 3488 | 3564 | 3641 | 3717  | 3793         | 3870 | 3946 | 4022 | 4098     |              |
| 94    | 4175          | 4251 | 4327 | 4403 | 4480  | 4556         | 4632 | 4709 | 4785 | 4861     |              |
| 95    | 4937          | 5014 | 5090 | 5166 | 5242  | 5319         | 5395 | 5471 | 5547 | 5624     |              |
| 96    | 5700          | 5776 | 5852 | 5929 | 6005  | 6081         | 6157 | 6233 | 6310 | 6386     |              |
| 97    | 6462          | 6538 | 6615 | 6691 | 6767  | 6843         | 6920 | 6996 | 7072 | 7148     |              |
| 98    | 7224          | 7301 | 7377 | 7453 | 7529  | 7606         | 7682 | 7758 | 7834 | 7910     |              |
| 99    | 7987          | 8063 | 8139 | 8215 | 8291  | 8368         | 8444 | 8520 | 8596 | 8672     |              |
| 5700  | 755 8749      | 8825 | 8901 | 8977 | 9053  | 9130         | 9206 | 9282 | 9358 | 9434     |              |
| N.    | 0             | 1    | 2    | 3    | 4     | 5            | 6    | 7    | 8    | 9        | P. P.        |
| 56500 | = 15° 41' 40" |      |      |      | 56500 | = 1° 34' 10" |      |      |      | S. 4.685 | 5206 T. 6835 |
| 56600 | = 15 43 20    |      |      |      | 56600 | = 1 34 20    |      |      |      |          | 5204 6839    |
| 56700 | = 15 45 0     |      |      |      | 56700 | = 1 34 30    |      |      |      |          | 5202 6843    |
| 56800 | = 15 46 40    |      |      |      | 56800 | = 1 34 40    |      |      |      |          | 5200 6847    |
| 56900 | = 15 48 20    |      |      |      | 56900 | = 1 34 50    |      |      |      |          | 5198 6850    |



| N.    | 0          | 1    | 2    | 3    | 4     | 5         | 6           | 7     | 8     | 9     | P. P. |
|-------|------------|------|------|------|-------|-----------|-------------|-------|-------|-------|-------|
| 5700  | 755 8749   | 8825 | 8901 | 8977 | 9051  | 9130      | 9206        | 9282  | 9358  | 9434  |       |
| 01    | 9510       | 9587 | 9663 | 9739 | 9815  | 9891      | 9967        | 10043 | 10119 | 10195 |       |
| 02    | 756 0272   | 0348 | 0424 | 0501 | 0577  | 0653      | 0729        | 0805  | 0881  | 0957  |       |
| 03    | 1034       | 1110 | 1186 | 1262 | 1338  | 1414      | 1490        | 1566  | 1642  | 1718  |       |
| 04    | 1795       | 1871 | 1947 | 2023 | 2100  | 2176      | 2252        | 2328  | 2404  | 2480  |       |
| 05    | 2556       | 2633 | 2709 | 2785 | 2861  | 2937      | 3013        | 3089  | 3165  | 3241  |       |
| 06    | 3318       | 3394 | 3470 | 3546 | 3622  | 3698      | 3774        | 3850  | 3926  | 4002  |       |
| 07    | 4079       | 4155 | 4231 | 4307 | 4383  | 4459      | 4535        | 4611  | 4687  | 4763  | 1 37  |
| 08    | 4840       | 4916 | 4992 | 5068 | 5144  | 5220      | 5296        | 5372  | 5448  | 5524  | 2 37  |
| 09    | 5600       | 5677 | 5753 | 5829 | 5905  | 5981      | 6057        | 6133  | 6209  | 6285  | 3 37  |
| 5710  | 756 6361   | 6437 | 6513 | 6589 | 6665  | 6741      | 6817        | 6893  | 6969  | 7045  | 4 37  |
| 11    | 7122       | 7198 | 7274 | 7350 | 7426  | 7502      | 7578        | 7654  | 7730  | 7806  | 5 37  |
| 12    | 7882       | 7958 | 8034 | 8110 | 8186  | 8262      | 8338        | 8414  | 8490  | 8566  | 6 37  |
| 13    | 8642       | 8718 | 8794 | 8870 | 8946  | 9022      | 9098        | 9174  | 9250  | 9326  | 7 37  |
| 14    | 9402       | 9478 | 9554 | 9630 | 9706  | 9782      | 9858        | 9934  | 10010 | 10086 | 8 37  |
| 15    | 757 0162   | 0238 | 0314 | 0390 | 0466  | 0542      | 0618        | 0694  | 0770  | 0846  | 9 37  |
| 16    | 0922       | 0998 | 1074 | 1150 | 1226  | 1302      | 1378        | 1454  | 1530  | 1606  |       |
| 17    | 1682       | 1758 | 1834 | 1910 | 1986  | 2062      | 2138        | 2214  | 2290  | 2366  |       |
| 18    | 2442       | 2518 | 2594 | 2670 | 2746  | 2822      | 2898        | 2974  | 3050  | 3126  |       |
| 19    | 3201       | 3277 | 3353 | 3429 | 3505  | 3581      | 3657        | 3733  | 3809  | 3885  |       |
| 5720  | 757 3960   | 4036 | 4112 | 4188 | 4264  | 4340      | 4416        | 4492  | 4568  | 4644  |       |
| 21    | 4719       | 4795 | 4871 | 4947 | 5023  | 5099      | 5175        | 5251  | 5327  | 5403  | 26    |
| 22    | 5479       | 5555 | 5631 | 5707 | 5783  | 5859      | 5935        | 6011  | 6087  | 6163  | 27    |
| 23    | 6237       | 6313 | 6389 | 6465 | 6541  | 6617      | 6693        | 6769  | 6845  | 6921  | 28    |
| 24    | 6996       | 7072 | 7148 | 7224 | 7300  | 7376      | 7452        | 7528  | 7604  | 7680  | 29    |
| 25    | 7755       | 7831 | 7907 | 7983 | 8059  | 8135      | 8211        | 8287  | 8363  | 8439  |       |
| 26    | 8513       | 8589 | 8665 | 8741 | 8817  | 8893      | 8969        | 9045  | 9121  | 9197  |       |
| 27    | 9272       | 9348 | 9424 | 9500 | 9576  | 9652      | 9728        | 9804  | 9880  | 9956  |       |
| 28    | 758 0010   | 0106 | 0182 | 0258 | 0334  | 0410      | 0486        | 0562  | 0638  | 0714  |       |
| 29    | 0788       | 0864 | 0940 | 1016 | 1092  | 1168      | 1244        | 1320  | 1396  | 1472  |       |
| 5730  | 758 1546   | 1622 | 1698 | 1774 | 1850  | 1926      | 2002        | 2078  | 2154  | 2230  |       |
| 31    | 2304       | 2380 | 2456 | 2532 | 2608  | 2684      | 2760        | 2836  | 2912  | 2988  |       |
| 32    | 3062       | 3138 | 3214 | 3290 | 3366  | 3442      | 3518        | 3594  | 3670  | 3746  |       |
| 33    | 3819       | 3895 | 3971 | 4047 | 4123  | 4199      | 4275        | 4351  | 4427  | 4503  |       |
| 34    | 4577       | 4653 | 4729 | 4805 | 4881  | 4957      | 5033        | 5109  | 5185  | 5261  |       |
| 35    | 5334       | 5410 | 5486 | 5562 | 5638  | 5714      | 5790        | 5866  | 5942  | 6018  |       |
| 36    | 6091       | 6167 | 6243 | 6319 | 6395  | 6471      | 6547        | 6623  | 6699  | 6775  |       |
| 37    | 6848       | 6924 | 7000 | 7076 | 7152  | 7228      | 7304        | 7380  | 7456  | 7532  |       |
| 38    | 7605       | 7681 | 7757 | 7833 | 7909  | 7985      | 8061        | 8137  | 8213  | 8289  |       |
| 39    | 8362       | 8438 | 8514 | 8590 | 8666  | 8742      | 8818        | 8894  | 8970  | 9046  |       |
| 5740  | 758 9119   | 9195 | 9271 | 9347 | 9423  | 9499      | 9575        | 9651  | 9727  | 9803  |       |
| 41    | 9875       | 9951 | 0027 | 0103 | 0179  | 0255      | 0331        | 0407  | 0483  | 0559  |       |
| 42    | 759 0632   | 0708 | 0784 | 0860 | 0936  | 1012      | 1088        | 1164  | 1240  | 1316  |       |
| 43    | 1388       | 1464 | 1540 | 1616 | 1692  | 1768      | 1844        | 1920  | 1996  | 2072  |       |
| 44    | 2144       | 2220 | 2296 | 2372 | 2448  | 2524      | 2600        | 2676  | 2752  | 2828  |       |
| 45    | 2900       | 2976 | 3052 | 3128 | 3204  | 3280      | 3356        | 3432  | 3508  | 3584  |       |
| 46    | 3656       | 3732 | 3808 | 3884 | 3960  | 4036      | 4112        | 4188  | 4264  | 4340  |       |
| 47    | 4412       | 4488 | 4564 | 4640 | 4716  | 4792      | 4868        | 4944  | 5020  | 5096  |       |
| 48    | 5168       | 5244 | 5320 | 5396 | 5472  | 5548      | 5624        | 5700  | 5776  | 5852  |       |
| 49    | 5923       | 5999 | 6075 | 6151 | 6227  | 6303      | 6379        | 6455  | 6531  | 6607  |       |
| 5750  | 759 6678   | 6754 | 6830 | 6906 | 6982  | 7058      | 7134        | 7210  | 7286  | 7362  |       |
| N.    | 0          | 1    | 2    | 3    | 4     | 5         | 6           | 7     | 8     | 9     | P. P. |
| 57000 | 15° 50' 0" |      |      |      | 57000 | 1° 35' 0" | 3. 4. 6. 8. | 3194  | 3194  | 3194  |       |
| 57100 | 15 51 40   |      |      |      | 57100 | 1 35 10   |             | 3194  | 3194  | 3194  |       |
| 57200 | 15 53 20   |      |      |      | 57200 | 1 35 20   |             | 3194  | 3194  | 3194  |       |
| 57300 | 15 55 0    |      |      |      | 57300 | 1 35 30   |             | 3194  | 3194  | 3194  |       |
| 57400 | 15 56 40   |      |      |      | 57400 | 1 35 40   |             | 3194  | 3194  | 3194  |       |







| N.    | 0        | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     | P. P. |
|-------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 5800  | 763 4280 | 4355  | 4430  | 4505  | 4579  | 4654  | 4729  | 4804  | 4879  | 4954  |       |
| 01    | 5029     | 5104  | 5178  | 5251  | 5328  | 5401  | 5476  | 5551  | 5626  | 5701  |       |
| 02    | 5777     | 5852  | 5927  | 6002  | 6077  | 6151  | 6226  | 6301  | 6376  | 6451  |       |
| 03    | 6526     | 6601  | 6675  | 6750  | 6825  | 6900  | 6975  | 7050  | 7125  | 7200  |       |
| 04    | 7274     | 7349  | 7424  | 7499  | 7574  | 7649  | 7724  | 7799  | 7874  | 7949  |       |
| 05    | 8022     | 8097  | 8172  | 8247  | 8321  | 8396  | 8471  | 8546  | 8621  | 8696  |       |
| 06    | 8770     | 8845  | 8920  | 8995  | 9070  | 9145  | 9220  | 9295  | 9370  | 9445  |       |
| 07    | 9518     | 9593  | 9668  | 9743  | 9817  | 9892  | 9967  | 10042 | 10117 | 10192 |       |
| 08    | 764 0266 | 0341  | 0416  | 0490  | 0565  | 0640  | 0715  | 0790  | 0865  | 0940  |       |
| 09    | 1014     | 1089  | 1164  | 1238  | 1313  | 1388  | 1463  | 1538  | 1613  | 1688  |       |
| 5810  | 764 1761 | 1836  | 1911  | 1986  | 2061  | 2136  | 2211  | 2286  | 2361  | 2436  |       |
| 10    | 2509     | 2584  | 2658  | 2733  | 2808  | 2883  | 2958  | 3033  | 3108  | 3183  |       |
| 11    | 3250     | 3325  | 3400  | 3475  | 3550  | 3625  | 3700  | 3775  | 3850  | 3925  |       |
| 12    | 4003     | 4078  | 4153  | 4227  | 4302  | 4377  | 4452  | 4527  | 4602  | 4677  |       |
| 13    | 4750     | 4825  | 4900  | 4975  | 5050  | 5125  | 5200  | 5275  | 5350  | 5425  |       |
| 14    | 5497     | 5572  | 5647  | 5722  | 5797  | 5872  | 5947  | 6022  | 6097  | 6172  |       |
| 15    | 6241     | 6316  | 6391  | 6466  | 6541  | 6616  | 6691  | 6766  | 6841  | 6916  |       |
| 16    | 6991     | 7066  | 7140  | 7215  | 7290  | 7365  | 7440  | 7515  | 7590  | 7665  |       |
| 17    | 7737     | 7812  | 7886  | 7961  | 8036  | 8111  | 8186  | 8261  | 8336  | 8411  |       |
| 18    | 8484     | 8558  | 8633  | 8707  | 8782  | 8857  | 8932  | 9007  | 9082  | 9157  |       |
| 19    | 9230     | 9304  | 9379  | 9454  | 9528  | 9603  | 9678  | 9753  | 9828  | 9903  |       |
| 5820  | 764 9230 | 9304  | 9379  | 9454  | 9528  | 9603  | 9678  | 9753  | 9828  | 9903  |       |
| 20    | 9976     | 10051 | 10125 | 10200 | 10275 | 10350 | 10425 | 10500 | 10575 | 10650 |       |
| 21    | 765 0722 | 0797  | 0871  | 0946  | 1020  | 1095  | 1170  | 1245  | 1320  | 1395  |       |
| 22    | 1468     | 1544  | 1619  | 1693  | 1768  | 1843  | 1918  | 1993  | 2068  | 2143  |       |
| 23    | 2214     | 2288  | 2363  | 2437  | 2512  | 2587  | 2662  | 2737  | 2812  | 2887  |       |
| 24    | 2959     | 3034  | 3108  | 3183  | 3258  | 3333  | 3408  | 3483  | 3558  | 3633  |       |
| 25    | 3705     | 3779  | 3854  | 3928  | 4003  | 4078  | 4153  | 4228  | 4303  | 4378  |       |
| 26    | 4450     | 4525  | 4599  | 4674  | 4749  | 4824  | 4899  | 4974  | 5049  | 5124  |       |
| 27    | 5270     | 5345  | 5419  | 5494  | 5569  | 5644  | 5719  | 5794  | 5869  | 5944  |       |
| 28    | 5941     | 6015  | 6090  | 6165  | 6240  | 6315  | 6390  | 6465  | 6540  | 6615  |       |
| 29    | 6686     | 6760  | 6835  | 6910  | 6985  | 7060  | 7135  | 7210  | 7285  | 7360  |       |
| 5830  | 765 6686 | 6760  | 6835  | 6910  | 6985  | 7060  | 7135  | 7210  | 7285  | 7360  |       |
| 30    | 7430     | 7505  | 7579  | 7654  | 7729  | 7804  | 7879  | 7954  | 8029  | 8104  |       |
| 31    | 8175     | 8250  | 8324  | 8399  | 8474  | 8549  | 8624  | 8699  | 8774  | 8849  |       |
| 32    | 8920     | 8995  | 9069  | 9144  | 9219  | 9294  | 9369  | 9444  | 9519  | 9594  |       |
| 33    | 9664     | 9739  | 9813  | 9888  | 9963  | 10038 | 10113 | 10188 | 10263 | 10338 |       |
| 34    | 9664     | 9739  | 9813  | 9888  | 9963  | 10038 | 10113 | 10188 | 10263 | 10338 |       |
| 35    | 766 0409 | 0483  | 0557  | 0632  | 0707  | 0781  | 0856  | 0931  | 1006  | 1081  |       |
| 36    | 1153     | 1227  | 1302  | 1376  | 1451  | 1525  | 1600  | 1675  | 1750  | 1825  |       |
| 37    | 1897     | 1971  | 2046  | 2120  | 2195  | 2269  | 2344  | 2419  | 2494  | 2569  |       |
| 38    | 2641     | 2715  | 2790  | 2864  | 2939  | 3013  | 3088  | 3163  | 3238  | 3313  |       |
| 39    | 3385     | 3459  | 3534  | 3608  | 3683  | 3757  | 3832  | 3907  | 3982  | 4057  |       |
| 5840  | 766 4128 | 4203  | 4277  | 4352  | 4426  | 4501  | 4576  | 4651  | 4726  | 4801  |       |
| 40    | 4872     | 4946  | 5021  | 5095  | 5170  | 5245  | 5320  | 5395  | 5470  | 5545  |       |
| 41    | 5616     | 5690  | 5764  | 5839  | 5913  | 5988  | 6063  | 6138  | 6213  | 6288  |       |
| 42    | 6359     | 6433  | 6508  | 6582  | 6657  | 6731  | 6806  | 6881  | 6956  | 7031  |       |
| 43    | 7101     | 7175  | 7249  | 7324  | 7398  | 7473  | 7548  | 7623  | 7698  | 7773  |       |
| 44    | 7815     | 7919  | 7994  | 8068  | 8143  | 8217  | 8292  | 8367  | 8442  | 8517  |       |
| 45    | 8588     | 8662  | 8737  | 8811  | 8886  | 8960  | 9035  | 9110  | 9185  | 9260  |       |
| 46    | 9331     | 9405  | 9479  | 9554  | 9628  | 9703  | 9778  | 9853  | 9928  | 10003 |       |
| 47    | 767 0074 | 0148  | 0222  | 0296  | 0371  | 0445  | 0519  | 0594  | 0668  | 0743  |       |
| 48    | 0816     | 0890  | 0965  | 1039  | 1113  | 1187  | 1262  | 1337  | 1411  | 1486  |       |
| 49    | 1559     | 1633  | 1707  | 1781  | 1856  | 1930  | 2005  | 2079  | 2154  | 2229  |       |
| 5850  | 767 1559 | 1633  | 1707  | 1781  | 1856  | 1930  | 2005  | 2079  | 2154  | 2229  |       |
| N.    | 0        | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     | P. P. |
| 58000 | 16       | 6     | 40    |       |       |       |       |       |       |       |       |
| 58100 | 16       | 8     | 20    |       |       |       |       |       |       |       |       |
| 58200 | 16       | 10    | 0     |       |       |       |       |       |       |       |       |
| 58300 | 16       | 11    | 40    |       |       |       |       |       |       |       |       |
| 58400 | 16       | 13    | 20    |       |       |       |       |       |       |       |       |



| N.    | 0            | 1    | 2    | 3    | 4     | 5            | 6        | 7     | 8       | 9     | P. P.  |
|-------|--------------|------|------|------|-------|--------------|----------|-------|---------|-------|--------|
| 5850  | 767 1559     | 1633 | 1707 | 1781 | 1856  | 1930         | 2004     | 2078  | 2153    | 2227  |        |
| 51    | 2301         | 2375 | 2449 | 2524 | 2598  | 2672         | 2746     | 2821  | 2895    | 2969  |        |
| 52    | 3043         | 3117 | 3192 | 3266 | 3340  | 3414         | 3488     | 3563  | 3637    | 3711  |        |
| 53    | 3785         | 3859 | 3934 | 4008 | 4082  | 4156         | 4230     | 4305  | 4379    | 4453  |        |
| 54    | 4527         | 4601 | 4676 | 4750 | 4824  | 4898         | 4972     | 5046  | 5121    | 5195  |        |
| 55    | 5269         | 5343 | 5417 | 5492 | 5566  | 5640         | 5714     | 5788  | 5862    | 5937  |        |
| 56    | 6011         | 6085 | 6159 | 6233 | 6307  | 6381         | 6456     | 6530  | 6604    | 6678  |        |
| 57    | 6752         | 6826 | 6901 | 6975 | 7049  | 7123         | 7197     | 7271  | 7345    | 7420  |        |
| 58    | 7494         | 7568 | 7642 | 7716 | 7790  | 7864         | 7938     | 8013  | 8087    | 8161  |        |
| 59    | 8235         | 8309 | 8383 | 8457 | 8531  | 8606         | 8680     | 8754  | 8828    | 8902  |        |
| 5860  | 767 8976     | 9050 | 9124 | 9198 | 9273  | 9347         | 9421     | 9495  | 9569    | 9643  |        |
| 61    | 9717         | 9791 | 9865 | 9940 | 10014 | 10088        | 10162    | 10236 | 10310   | 10384 | 74     |
| 62    | 768 0458     | 0532 | 0606 | 0680 | 0754  | 0829         | 0903     | 0977  | 1051    | 1125  | 1 7.4  |
| 63    | 1199         | 1273 | 1347 | 1421 | 1495  | 1569         | 1643     | 1717  | 1791    | 1866  | 2 14.8 |
| 64    | 1940         | 2014 | 2088 | 2162 | 2236  | 2310         | 2384     | 2458  | 2532    | 2606  | 3 22.2 |
| 65    | 2680         | 2754 | 2828 | 2902 | 2976  | 3050         | 3124     | 3198  | 3273    | 3347  | 4 29.6 |
| 66    | 3421         | 3495 | 3569 | 3643 | 3717  | 3791         | 3865     | 3939  | 4013    | 4087  | 5 37.0 |
| 67    | 4161         | 4235 | 4309 | 4383 | 4457  | 4531         | 4605     | 4679  | 4753    | 4827  | 6 44.4 |
| 68    | 4901         | 4975 | 5049 | 5123 | 5197  | 5271         | 5345     | 5419  | 5493    | 5567  | 7 51.8 |
| 69    | 5641         | 5715 | 5789 | 5863 | 5937  | 6011         | 6085     | 6159  | 6233    | 6307  | 8 59.2 |
| 5870  | 768 6381     | 6455 | 6529 | 6603 | 6677  | 6751         | 6825     | 6899  | 6973    | 7047  | 9 66.6 |
| 71    | 7121         | 7195 | 7269 | 7343 | 7417  | 7491         | 7565     | 7639  | 7713    | 7787  |        |
| 72    | 7860         | 7934 | 8008 | 8082 | 8156  | 8230         | 8304     | 8378  | 8452    | 8526  |        |
| 73    | 8600         | 8674 | 8748 | 8822 | 8896  | 8970         | 9044     | 9118  | 9192    | 9266  |        |
| 74    | 9339         | 9413 | 9487 | 9561 | 9635  | 9709         | 9783     | 9857  | 9931    | 10005 |        |
| 75    | 769 0079     | 0153 | 0227 | 0300 | 0374  | 0448         | 0522     | 0596  | 0670    | 0744  |        |
| 76    | 0818         | 0892 | 0966 | 1040 | 1114  | 1187         | 1261     | 1335  | 1409    | 1483  |        |
| 77    | 1557         | 1631 | 1705 | 1779 | 1852  | 1926         | 2000     | 2074  | 2148    | 2222  |        |
| 78    | 2296         | 2370 | 2444 | 2517 | 2591  | 2665         | 2739     | 2813  | 2887    | 2961  |        |
| 79    | 3035         | 3108 | 3182 | 3256 | 3330  | 3404         | 3478     | 3552  | 3626    | 3699  |        |
| 5880  | 769 3773     | 3847 | 3921 | 3995 | 4069  | 4143         | 4216     | 4290  | 4364    | 4438  |        |
| 81    | 4512         | 4586 | 4659 | 4733 | 4807  | 4881         | 4955     | 5029  | 5103    | 5176  | 73     |
| 82    | 5250         | 5324 | 5398 | 5472 | 5546  | 5619         | 5693     | 5767  | 5841    | 5915  | 1 7.3  |
| 83    | 5988         | 6062 | 6136 | 6210 | 6284  | 6358         | 6431     | 6505  | 6579    | 6653  | 2 14.6 |
| 84    | 6727         | 6800 | 6874 | 6948 | 7022  | 7096         | 7169     | 7243  | 7317    | 7391  | 3 21.9 |
| 85    | 7465         | 7538 | 7612 | 7686 | 7760  | 7834         | 7907     | 7981  | 8055    | 8129  | 4 29.2 |
| 86    | 8203         | 8276 | 8350 | 8424 | 8498  | 8571         | 8645     | 8719  | 8793    | 8867  | 5 36.5 |
| 87    | 8940         | 9014 | 9088 | 9162 | 9235  | 9309         | 9383     | 9457  | 9530    | 9604  | 6 43.8 |
| 88    | 9678         | 9752 | 9826 | 9899 | 9973  | 10047        | 10121    | 10194 | 10268   | 10342 | 7 51.1 |
| 89    | 770 0416     | 0489 | 0563 | 0637 | 0711  | 0784         | 0858     | 0932  | 1005    | 1079  | 8 58.4 |
| 5890  | 770 1153     | 1227 | 1300 | 1374 | 1448  | 1522         | 1595     | 1669  | 1743    | 1817  | 9 65.7 |
| 91    | 1890         | 1964 | 2038 | 2111 | 2185  | 2259         | 2333     | 2406  | 2480    | 2554  |        |
| 92    | 2627         | 2701 | 2775 | 2849 | 2922  | 2996         | 3070     | 3143  | 3217    | 3291  |        |
| 93    | 3364         | 3438 | 3512 | 3585 | 3659  | 3733         | 3807     | 3880  | 3954    | 4028  |        |
| 94    | 4101         | 4175 | 4249 | 4322 | 4396  | 4470         | 4543     | 4617  | 4691    | 4764  |        |
| 95    | 4838         | 4912 | 4985 | 5059 | 5133  | 5206         | 5280     | 5354  | 5427    | 5501  |        |
| 96    | 5575         | 5648 | 5722 | 5796 | 5869  | 5943         | 6017     | 6090  | 6164    | 6238  |        |
| 97    | 6311         | 6385 | 6459 | 6532 | 6606  | 6679         | 6753     | 6827  | 6900    | 6974  |        |
| 98    | 7048         | 7121 | 7195 | 7269 | 7342  | 7416         | 7489     | 7563  | 7637    | 7710  |        |
| 99    | 7784         | 7858 | 7931 | 8005 | 8078  | 8152         | 8226     | 8299  | 8373    | 8447  |        |
| 5900  | 770 8520     | 8594 | 8667 | 8741 | 8815  | 8888         | 8962     | 9035  | 9109    | 9183  |        |
| N.    | 0            | 1    | 2    | 3    | 4     | 5            | 6        | 7     | 8       | 9     | P. P.  |
| 58500 | = 16° 15' 0" |      |      |      | 58500 | = 1° 37' 30" | S. 4.685 | 5166  | T. 6913 |       |        |
| 58600 | = 16 16 40   |      |      |      | 58600 | = 1 37 40    |          | 5164  | 6917    |       |        |
| 58700 | = 16 18 20   |      |      |      | 58700 | = 1 37 50    |          | 5162  | 6921    |       |        |
| 58800 | = 16 20 0    |      |      |      | 58800 | = 1 38 0     |          | 5160  | 6925    |       |        |
| 58900 | = 16 21 40   |      |      |      | 58900 | = 1 38 10    |          | 5158  | 6929    |       |        |



| N.    | 0           | 1    | 2    | 3    | 4    | 5           | 6       | 7    | 8       | 9    | P. P. |
|-------|-------------|------|------|------|------|-------------|---------|------|---------|------|-------|
| 5900  | 770 8520    | 8594 | 8667 | 8741 | 8815 | 8888        | 8961    | 9035 | 9109    | 9183 |       |
| 01    | 9256        | 9330 | 9403 | 9477 | 9551 | 9624        | 9698    | 9771 | 9845    | 9918 |       |
| 02    | 9992        | 0066 | 0139 | 0213 | 0286 | 0360        | 0434    | 0507 | 0581    | 0654 |       |
| 03    | 771 0728    | 0801 | 0875 | 0949 | 1022 | 1096        | 1169    | 1243 | 1316    | 1390 |       |
| 04    | 1463        | 1537 | 1611 | 1684 | 1758 | 1831        | 1905    | 1978 | 2052    | 2125 |       |
| 05    | 2199        | 2273 | 2346 | 2420 | 2493 | 2567        | 2640    | 2714 | 2787    | 2861 |       |
| 06    | 2934        | 3008 | 3081 | 3155 | 3229 | 3302        | 3376    | 3449 | 3523    | 3596 |       |
| 07    | 3670        | 3743 | 3817 | 3890 | 3964 | 4037        | 4111    | 4184 | 4258    | 4331 |       |
| 08    | 4405        | 4478 | 4552 | 4625 | 4699 | 4772        | 4846    | 4919 | 4993    | 5066 |       |
| 09    | 5140        | 5213 | 5287 | 5360 | 5434 | 5507        | 5581    | 5654 | 5728    | 5801 |       |
| 5910  | 771 5875    | 5948 | 6022 | 6095 | 6169 | 6242        | 6316    | 6389 | 6463    | 6536 |       |
| 11    | 6610        | 6683 | 6757 | 6830 | 6903 | 6977        | 7050    | 7124 | 7197    | 7271 | 74    |
| 12    | 7344        | 7418 | 7491 | 7565 | 7638 | 7712        | 7785    | 7859 | 7932    | 8006 | 75    |
| 13    | 8079        | 8152 | 8226 | 8299 | 8373 | 8446        | 8519    | 8593 | 8666    | 8740 | 76    |
| 14    | 8813        | 8887 | 8960 | 9034 | 9107 | 9180        | 9254    | 9327 | 9401    | 9474 | 77    |
| 15    | 9547        | 9621 | 9694 | 9768 | 9841 | 9915        | 9988    | 0061 | 0135    | 0208 | 78    |
| 16    | 772 0282    | 0355 | 0428 | 0502 | 0575 | 0649        | 0722    | 0796 | 0869    | 0942 | 79    |
| 17    | 1016        | 1089 | 1162 | 1236 | 1309 | 1383        | 1456    | 1529 | 1603    | 1676 | 80    |
| 18    | 1750        | 1823 | 1896 | 1970 | 2043 | 2117        | 2190    | 2264 | 2337    | 2411 | 81    |
| 19    | 2483        | 2557 | 2630 | 2704 | 2777 | 2851        | 2924    | 2997 | 3071    | 3144 | 82    |
| 5920  | 772 3217    | 3290 | 3364 | 3437 | 3510 | 3584        | 3657    | 3731 | 3804    | 3877 |       |
| 21    | 3951        | 4024 | 4097 | 4171 | 4244 | 4317        | 4391    | 4464 | 4538    | 4611 |       |
| 22    | 4684        | 4757 | 4831 | 4904 | 4977 | 5051        | 5124    | 5197 | 5271    | 5344 |       |
| 23    | 5417        | 5491 | 5564 | 5637 | 5711 | 5784        | 5857    | 5931 | 6004    | 6077 |       |
| 24    | 6150        | 6224 | 6297 | 6370 | 6444 | 6517        | 6590    | 6664 | 6737    | 6811 |       |
| 25    | 6884        | 6957 | 7030 | 7103 | 7177 | 7250        | 7324    | 7397 | 7471    | 7544 |       |
| 26    | 7616        | 7690 | 7763 | 7836 | 7910 | 7983        | 8056    | 8129 | 8203    | 8276 |       |
| 27    | 8349        | 8423 | 8496 | 8569 | 8642 | 8716        | 8789    | 8862 | 8936    | 9009 |       |
| 28    | 9082        | 9155 | 9228 | 9302 | 9375 | 9448        | 9522    | 9595 | 9668    | 9742 |       |
| 29    | 9815        | 9888 | 9961 | 0034 | 0107 | 0181        | 0254    | 0327 | 0401    | 0474 |       |
| 5930  | 773 0547    | 0620 | 0693 | 0767 | 0840 | 0913        | 0986    | 1060 | 1133    | 1206 |       |
| 31    | 1279        | 1352 | 1426 | 1499 | 1572 | 1645        | 1719    | 1792 | 1865    | 1938 | 73    |
| 32    | 2011        | 2085 | 2158 | 2231 | 2304 | 2377        | 2451    | 2524 | 2597    | 2671 | 74    |
| 33    | 2743        | 2817 | 2890 | 2963 | 3036 | 3109        | 3183    | 3256 | 3329    | 3402 | 75    |
| 34    | 3475        | 3549 | 3622 | 3695 | 3768 | 3841        | 3915    | 3988 | 4061    | 4134 | 76    |
| 35    | 4207        | 4280 | 4354 | 4427 | 4500 | 4573        | 4646    | 4719 | 4792    | 4865 | 77    |
| 36    | 4939        | 5012 | 5085 | 5158 | 5231 | 5305        | 5378    | 5451 | 5524    | 5597 | 78    |
| 37    | 5670        | 5744 | 5817 | 5890 | 5963 | 6036        | 6109    | 6183 | 6256    | 6329 | 79    |
| 38    | 6402        | 6475 | 6548 | 6621 | 6694 | 6768        | 6841    | 6914 | 6987    | 7060 | 80    |
| 39    | 7133        | 7206 | 7280 | 7353 | 7426 | 7499        | 7572    | 7645 | 7718    | 7791 | 81    |
| 5940  | 773 7864    | 7938 | 8011 | 8084 | 8157 | 8230        | 8303    | 8376 | 8449    | 8522 |       |
| 41    | 8596        | 8669 | 8742 | 8815 | 8888 | 8961        | 9034    | 9107 | 9180    | 9253 |       |
| 42    | 9326        | 9400 | 9473 | 9546 | 9619 | 9692        | 9765    | 9838 | 9911    | 9984 |       |
| 43    | 774 0057    | 0130 | 0203 | 0277 | 0350 | 0423        | 0496    | 0569 | 0642    | 0715 |       |
| 44    | 0788        | 0861 | 0934 | 1007 | 1080 | 1153        | 1226    | 1299 | 1372    | 1445 |       |
| 45    | 1519        | 1592 | 1665 | 1738 | 1811 | 1884        | 1957    | 2030 | 2103    | 2176 |       |
| 46    | 2249        | 2322 | 2395 | 2468 | 2541 | 2614        | 2687    | 2760 | 2833    | 2906 |       |
| 47    | 2979        | 3052 | 3125 | 3198 | 3271 | 3344        | 3417    | 3490 | 3563    | 3636 |       |
| 48    | 3710        | 3783 | 3856 | 3929 | 4002 | 4075        | 4148    | 4221 | 4294    | 4367 |       |
| 49    | 4440        | 4513 | 4586 | 4659 | 4732 | 4805        | 4878    | 4951 | 5024    | 5097 |       |
| 5950  | 774 5170    | 5243 | 5316 | 5389 | 5462 | 5535        | 5608    | 5681 | 5754    | 5827 |       |
| N.    | 0           | 1    | 2    | 3    | 4    | 5           | 6       | 7    | 8       | 9    | P. P. |
| 59000 | 16° 23' 00" |      |      |      | 5900 | 16° 23' 30" | B. 4.68 | 5156 | T. 6011 |      |       |
| 59100 | 16 25 00    |      |      |      | 5910 | 16 25 30    |         | 5158 | 6013    |      |       |
| 59200 | 16 26 40    |      |      |      | 5920 | 16 26 40    |         | 5158 | 6017    |      |       |
| 59300 | 16 28 20    |      |      |      | 5930 | 16 28 30    |         | 5158 | 6018    |      |       |
| 59400 | 16 30 00    |      |      |      | 5940 | 16 30 00    |         | 5158 | 6019    |      |       |



| N.   | 0                    | 1    | 2    | 3                   | 4    | 5    | 6        | 7    | 8       | 9    | P. P.  |
|------|----------------------|------|------|---------------------|------|------|----------|------|---------|------|--------|
| 5950 | 774 5170             | 5243 | 5316 | 5389                | 5462 | 5535 | 5608     | 5681 | 5754    | 5827 |        |
| 51   | 5900                 | 5972 | 6045 | 6118                | 6191 | 6264 | 6337     | 6410 | 6483    | 6556 |        |
| 52   | 6629                 | 6702 | 6775 | 6848                | 6921 | 6994 | 7067     | 7140 | 7213    | 7286 |        |
| 53   | 7359                 | 7432 | 7505 | 7578                | 7651 | 7724 | 7797     | 7869 | 7942    | 8015 |        |
| 54   | 8088                 | 8161 | 8234 | 8307                | 8380 | 8453 | 8526     | 8599 | 8672    | 8745 |        |
| 55   | 8818                 | 8891 | 8964 | 9036                | 9109 | 9182 | 9255     | 9328 | 9401    | 9474 |        |
| 56   | 9547                 | 9620 | 9693 | 9766                | 9839 | 9911 | 9984     | 0057 | 0130    | 0203 |        |
| 57   | 775 0276             | 0349 | 0422 | 0495                | 0568 | 0641 | 0713     | 0786 | 0859    | 0932 |        |
| 58   | 1005                 | 1078 | 1151 | 1224                | 1297 | 1369 | 1442     | 1515 | 1588    | 1661 |        |
| 59   | 1734                 | 1807 | 1880 | 1952                | 2025 | 2098 | 2171     | 2244 | 2317    | 2390 |        |
| 5960 | 775 2463             | 2535 | 2608 | 2681                | 2754 | 2827 | 2900     | 2973 | 3046    | 3118 |        |
| 61   | 3191                 | 3264 | 3337 | 3410                | 3483 | 3555 | 3628     | 3701 | 3774    | 3847 | 73     |
| 62   | 3920                 | 3993 | 4065 | 4138                | 4211 | 4284 | 4357     | 4430 | 4502    | 4575 | 1 7.3  |
| 63   | 4648                 | 4721 | 4794 | 4867                | 4939 | 5012 | 5085     | 5158 | 5231    | 5304 | 2 14.6 |
| 64   | 5376                 | 5449 | 5522 | 5595                | 5668 | 5740 | 5813     | 5886 | 5959    | 6032 | 3 21.9 |
| 65   | 6104                 | 6177 | 6250 | 6323                | 6396 | 6469 | 6541     | 6614 | 6687    | 6760 | 4 29.2 |
| 66   | 6832                 | 6905 | 6978 | 7051                | 7124 | 7196 | 7269     | 7342 | 7415    | 7488 | 5 36.5 |
| 67   | 7560                 | 7633 | 7706 | 7779                | 7851 | 7924 | 7997     | 8070 | 8143    | 8215 | 6 43.8 |
| 68   | 8288                 | 8361 | 8434 | 8506                | 8579 | 8652 | 8725     | 8798 | 8870    | 8943 | 7 51.1 |
| 69   | 9016                 | 9089 | 9161 | 9234                | 9307 | 9380 | 9452     | 9525 | 9598    | 9671 | 8 58.4 |
| 5970 | 775 9743             | 9816 | 9889 | 9962                | 0034 | 0107 | 0180     | 0253 | 0325    | 0398 | 9 65.7 |
| 71   | 776 0471             | 0543 | 0616 | 0689                | 0762 | 0834 | 0907     | 0980 | 1053    | 1125 |        |
| 72   | 1198                 | 1271 | 1343 | 1416                | 1489 | 1562 | 1634     | 1707 | 1780    | 1852 |        |
| 73   | 1925                 | 1998 | 2071 | 2143                | 2216 | 2289 | 2361     | 2434 | 2507    | 2579 |        |
| 74   | 2652                 | 2725 | 2798 | 2870                | 2943 | 3016 | 3088     | 3161 | 3234    | 3306 |        |
| 75   | 3379                 | 3452 | 3524 | 3597                | 3670 | 3743 | 3815     | 3888 | 3961    | 4033 |        |
| 76   | 4106                 | 4179 | 4251 | 4324                | 4397 | 4469 | 4542     | 4615 | 4687    | 4760 |        |
| 77   | 4833                 | 4905 | 4978 | 5051                | 5123 | 5196 | 5269     | 5341 | 5414    | 5486 |        |
| 78   | 5559                 | 5632 | 5704 | 5777                | 5850 | 5922 | 5995     | 6068 | 6140    | 6213 |        |
| 79   | 6286                 | 6358 | 6431 | 6503                | 6576 | 6649 | 6721     | 6794 | 6867    | 6939 |        |
| 5980 | 776 7012             | 7084 | 7157 | 7230                | 7302 | 7375 | 7448     | 7520 | 7593    | 7665 |        |
| 81   | 7738                 | 7811 | 7883 | 7956                | 8028 | 8101 | 8174     | 8246 | 8319    | 8391 | 72     |
| 82   | 8404                 | 8477 | 8549 | 8622                | 8694 | 8767 | 8839     | 8912 | 8984    | 9056 | 1 7.2  |
| 83   | 9190                 | 9263 | 9335 | 9408                | 9480 | 9553 | 9626     | 9698 | 9771    | 9843 | 2 14.4 |
| 84   | 9916                 | 9988 | 0061 | 0134                | 0206 | 0279 | 0351     | 0424 | 0496    | 0569 | 3 21.6 |
| 85   | 777 0642             | 0714 | 0787 | 0859                | 0932 | 1004 | 1077     | 1149 | 1222    | 1295 | 4 28.8 |
| 86   | 1367                 | 1440 | 1512 | 1585                | 1657 | 1730 | 1802     | 1875 | 1947    | 2020 | 5 36.0 |
| 87   | 2093                 | 2165 | 2238 | 2310                | 2383 | 2455 | 2528     | 2600 | 2673    | 2745 | 6 43.2 |
| 88   | 2818                 | 2890 | 2963 | 3035                | 3108 | 3181 | 3253     | 3326 | 3398    | 3471 | 7 50.4 |
| 89   | 3543                 | 3616 | 3688 | 3761                | 3833 | 3906 | 3978     | 4051 | 4123    | 4196 | 8 57.6 |
| 5990 | 777 4268             | 4341 | 4413 | 4486                | 4558 | 4631 | 4703     | 4776 | 4848    | 4921 | 9 64.8 |
| 91   | 4993                 | 5066 | 5138 | 5211                | 5283 | 5356 | 5428     | 5501 | 5573    | 5646 |        |
| 92   | 5718                 | 5791 | 5863 | 5935                | 6008 | 6080 | 6153     | 6225 | 6298    | 6370 |        |
| 93   | 6443                 | 6515 | 6588 | 6660                | 6733 | 6805 | 6878     | 6950 | 7022    | 7095 |        |
| 94   | 7167                 | 7240 | 7312 | 7385                | 7457 | 7530 | 7602     | 7675 | 7747    | 7819 |        |
| 95   | 7892                 | 7964 | 8037 | 8109                | 8182 | 8254 | 8327     | 8399 | 8471    | 8544 |        |
| 96   | 8616                 | 8689 | 8761 | 8834                | 8906 | 8978 | 9051     | 9123 | 9196    | 9268 |        |
| 97   | 9340                 | 9413 | 9485 | 9558                | 9630 | 9703 | 9775     | 9847 | 9920    | 9992 |        |
| 98   | 778 0065             | 0137 | 0209 | 0282                | 0354 | 0427 | 0499     | 0571 | 0644    | 0716 |        |
| 99   | 0789                 | 0861 | 0933 | 1006                | 1078 | 1151 | 1223     | 1295 | 1368    | 1440 |        |
| 6000 | 778 1513             | 1585 | 1657 | 1730                | 1802 | 1874 | 1947     | 2019 | 2092    | 2164 |        |
| N.   | 0                    | 1    | 2    | 3                   | 4    | 5    | 6        | 7    | 8       | 9    | P. P.  |
|      | 59500" = 16° 31' 40" |      |      | 59500" = 1° 39' 10" |      |      | S. 4.685 | 5146 | T. 6954 |      |        |
|      | 59600" = 16 33 20    |      |      | 59600" = 1 39 20    |      |      |          | 5144 | 6958    |      |        |
|      | 59700" = 16 35 0     |      |      | 59700" = 1 39 30    |      |      |          | 5142 | 6962    |      |        |
|      | 59800" = 16 36 40    |      |      | 59800" = 1 39 40    |      |      |          | 5140 | 6966    |      |        |
|      | 59900" = 16 38 20    |      |      | 59900" = 1 39 50    |      |      |          | 5138 | 6970    |      |        |



| N.    | 0        | 1    | 2    | 3    | 4     | 5       | 6     | 7     | 8     | 9     | P. P. |
|-------|----------|------|------|------|-------|---------|-------|-------|-------|-------|-------|
| 6000  | 778 1513 | 1585 | 1657 | 1730 | 1802  | 1874    | 1947  | 2019  | 2091  | 2163  |       |
| 01    | 2236     | 2309 | 2381 | 2453 | 2526  | 2598    | 2670  | 2743  | 2815  | 2888  |       |
| 02    | 2960     | 3032 | 3105 | 3177 | 3249  | 3322    | 3394  | 3467  | 3539  | 3611  |       |
| 03    | 3683     | 3756 | 3828 | 3900 | 3972  | 4045    | 4117  | 4189  | 4262  | 4334  |       |
| 04    | 4407     | 4479 | 4552 | 4624 | 4696  | 4768    | 4841  | 4913  | 4985  | 5058  |       |
| 05    | 5130     | 5202 | 5275 | 5347 | 5419  | 5492    | 5564  | 5637  | 5709  | 5781  |       |
| 06    | 5853     | 5926 | 5998 | 6070 | 6143  | 6215    | 6287  | 6360  | 6432  | 6504  |       |
| 07    | 6576     | 6649 | 6721 | 6793 | 6866  | 6938    | 7010  | 7083  | 7155  | 7227  |       |
| 08    | 7299     | 7372 | 7444 | 7516 | 7588  | 7661    | 7733  | 7805  | 7878  | 7950  |       |
| 09    | 8022     | 8094 | 8167 | 8239 | 8311  | 8384    | 8456  | 8528  | 8601  | 8673  |       |
| 6010  | 778 8745 | 8817 | 8880 | 8962 | 9034  | 9106    | 9178  | 9250  | 9322  | 9394  |       |
| 11    | 9467     | 9540 | 9612 | 9684 | 9756  | 9828    | 9901  | 9973  | 10045 | 10117 |       |
| 12    | 779 0190 | 0262 | 0334 | 0406 | 0479  | 0551    | 0623  | 0695  | 0768  | 0840  |       |
| 13    | 0912     | 0984 | 1056 | 1129 | 1201  | 1273    | 1345  | 1418  | 1490  | 1562  |       |
| 14    | 1634     | 1706 | 1779 | 1851 | 1923  | 1995    | 2068  | 2140  | 2212  | 2285  |       |
| 15    | 2356     | 2429 | 2501 | 2573 | 2645  | 2718    | 2790  | 2862  | 2935  | 3007  |       |
| 16    | 3078     | 3150 | 3223 | 3295 | 3367  | 3439    | 3512  | 3584  | 3656  | 3729  |       |
| 17    | 3800     | 3872 | 3944 | 4017 | 4089  | 4161    | 4234  | 4306  | 4378  | 4451  |       |
| 18    | 4523     | 4595 | 4668 | 4740 | 4812  | 4885    | 4957  | 5029  | 5102  | 5174  |       |
| 19    | 5246     | 5318 | 5390 | 5463 | 5535  | 5607    | 5680  | 5752  | 5824  | 5897  |       |
| 6020  | 779 5905 | 6037 | 6109 | 6181 | 6253  | 6325    | 6397  | 6470  | 6542  | 6614  |       |
| 21    | 6686     | 6758 | 6831 | 6903 | 6975  | 7047    | 7120  | 7192  | 7264  | 7337  |       |
| 22    | 7408     | 7480 | 7552 | 7624 | 7696  | 7769    | 7841  | 7913  | 7985  | 8058  |       |
| 23    | 8129     | 8201 | 8273 | 8345 | 8417  | 8489    | 8562  | 8634  | 8706  | 8778  |       |
| 24    | 8850     | 8922 | 8994 | 9066 | 9138  | 9210    | 9283  | 9355  | 9427  | 9499  |       |
| 25    | 9571     | 9643 | 9715 | 9787 | 9859  | 9931    | 10004 | 10076 | 10148 | 10220 |       |
| 26    | 780 0291 | 0363 | 0435 | 0507 | 0579  | 0651    | 0724  | 0796  | 0868  | 0940  |       |
| 27    | 1012     | 1084 | 1156 | 1228 | 1300  | 1372    | 1444  | 1516  | 1589  | 1661  |       |
| 28    | 1732     | 1804 | 1877 | 1949 | 2021  | 2093    | 2165  | 2238  | 2310  | 2382  |       |
| 29    | 2453     | 2525 | 2597 | 2669 | 2741  | 2813    | 2885  | 2958  | 3030  | 3102  |       |
| 6030  | 780 3173 | 3245 | 3317 | 3389 | 3461  | 3533    | 3605  | 3677  | 3750  | 3822  |       |
| 31    | 3893     | 3965 | 4037 | 4109 | 4181  | 4254    | 4326  | 4398  | 4470  | 4543  |       |
| 32    | 4615     | 4687 | 4759 | 4831 | 4903  | 4975    | 5048  | 5120  | 5192  | 5264  |       |
| 33    | 5336     | 5408 | 5480 | 5552 | 5624  | 5696    | 5769  | 5841  | 5913  | 5985  |       |
| 34    | 6057     | 6129 | 6201 | 6273 | 6345  | 6417    | 6489  | 6562  | 6634  | 6706  |       |
| 35    | 6778     | 6850 | 6922 | 6994 | 7066  | 7138    | 7210  | 7283  | 7355  | 7427  |       |
| 36    | 7498     | 7570 | 7642 | 7714 | 7786  | 7859    | 7931  | 8003  | 8075  | 8147  |       |
| 37    | 8218     | 8290 | 8362 | 8434 | 8506  | 8578    | 8650  | 8723  | 8795  | 8867  |       |
| 38    | 8938     | 9010 | 9082 | 9154 | 9226  | 9298    | 9370  | 9442  | 9514  | 9586  |       |
| 39    | 9657     | 9729 | 9801 | 9873 | 9945  | 10017   | 10089 | 10161 | 10233 | 10305 |       |
| 6040  | 781 0369 | 0441 | 0513 | 0585 | 0657  | 0729    | 0801  | 0873  | 0945  | 1017  |       |
| 41    | 1088     | 1160 | 1232 | 1304 | 1376  | 1448    | 1520  | 1592  | 1664  | 1736  |       |
| 42    | 1807     | 1879 | 1951 | 2023 | 2095  | 2167    | 2239  | 2311  | 2383  | 2455  |       |
| 43    | 2526     | 2598 | 2670 | 2742 | 2814  | 2886    | 2958  | 3030  | 3102  | 3174  |       |
| 44    | 3245     | 3317 | 3389 | 3461 | 3533  | 3605    | 3677  | 3750  | 3822  | 3894  |       |
| 45    | 3965     | 4037 | 4109 | 4181 | 4253  | 4325    | 4397  | 4469  | 4541  | 4613  |       |
| 46    | 4684     | 4756 | 4828 | 4900 | 4972  | 5044    | 5116  | 5188  | 5260  | 5332  |       |
| 47    | 5400     | 5472 | 5544 | 5616 | 5688  | 5760    | 5832  | 5904  | 5976  | 6048  |       |
| 48    | 6118     | 6190 | 6262 | 6334 | 6406  | 6478    | 6550  | 6622  | 6694  | 6766  |       |
| 49    | 6836     | 6908 | 6980 | 7052 | 7124  | 7196    | 7268  | 7340  | 7412  | 7484  |       |
| 6050  | 781 7554 | 7626 | 7697 | 7769 | 7841  | 7913    | 7985  | 8057  | 8129  | 8201  |       |
| N.    | 0        | 1    | 2    | 3    | 4     | 5       | 6     | 7     | 8     | 9     | P. P. |
| 60000 | 16 10 0  |      |      |      | 60000 | 1 40 0  |       |       |       |       |       |
| 60100 | 16 41 40 |      |      |      | 60100 | 1 40 10 |       |       |       |       |       |
| 60200 | 16 43 30 |      |      |      | 60200 | 1 40 20 |       |       |       |       |       |
| 60300 | 16 45 0  |      |      |      | 60300 | 1 40 30 |       |       |       |       |       |
| 60400 | 16 46 40 |      |      |      | 60400 | 1 40 40 |       |       |       |       |       |







| N.    | 0           | 1    | 2    | 3    | 4     | 5          | 6     | 7     | 8     | 9     | P. P. |
|-------|-------------|------|------|------|-------|------------|-------|-------|-------|-------|-------|
| 6100  | 785 3298    | 3370 | 3441 | 3512 | 3583  | 3654       | 3725  | 3796  | 3867  | 3938  |       |
| 01    | 4010        | 4081 | 4153 | 4224 | 4295  | 4366       | 4437  | 4508  | 4579  | 4650  |       |
| 02    | 4722        | 4793 | 4864 | 4935 | 5006  | 5077       | 5148  | 5219  | 5290  | 5361  |       |
| 03    | 5434        | 5505 | 5576 | 5647 | 5718  | 5789       | 5860  | 5931  | 6002  | 6073  |       |
| 04    | 6145        | 6216 | 6288 | 6359 | 6430  | 6501       | 6572  | 6643  | 6714  | 6785  |       |
| 05    | 6857        | 6928 | 6999 | 7070 | 7141  | 7212       | 7283  | 7354  | 7425  | 7496  |       |
| 06    | 7568        | 7639 | 7710 | 7781 | 7852  | 7923       | 7994  | 8065  | 8136  | 8207  |       |
| 07    | 8279        | 8350 | 8421 | 8492 | 8563  | 8634       | 8705  | 8776  | 8847  | 8918  |       |
| 08    | 8990        | 9061 | 9132 | 9203 | 9274  | 9345       | 9416  | 9487  | 9558  | 9629  |       |
| 09    | 9701        | 9772 | 9843 | 9914 | 9985  | 10000      | 10000 | 10000 | 10000 | 10000 |       |
| 6110  | 786 0412    | 0483 | 0554 | 0625 | 0696  | 0767       | 0838  | 0909  | 0980  | 1051  |       |
| 11    | 1123        | 1194 | 1265 | 1336 | 1407  | 1478       | 1549  | 1620  | 1691  | 1762  |       |
| 12    | 1833        | 1904 | 1975 | 2046 | 2117  | 2188       | 2259  | 2330  | 2401  | 2472  |       |
| 13    | 2544        | 2615 | 2686 | 2757 | 2828  | 2899       | 2970  | 3041  | 3112  | 3183  |       |
| 14    | 3254        | 3325 | 3396 | 3467 | 3538  | 3609       | 3680  | 3751  | 3822  | 3893  |       |
| 15    | 3965        | 4036 | 4107 | 4178 | 4249  | 4320       | 4391  | 4462  | 4533  | 4604  |       |
| 16    | 4675        | 4746 | 4817 | 4888 | 4959  | 5030       | 5101  | 5172  | 5243  | 5314  |       |
| 17    | 5385        | 5456 | 5527 | 5598 | 5669  | 5740       | 5811  | 5882  | 5953  | 6024  |       |
| 18    | 6095        | 6166 | 6237 | 6308 | 6379  | 6450       | 6521  | 6592  | 6663  | 6734  |       |
| 19    | 6805        | 6876 | 6947 | 7018 | 7089  | 7160       | 7231  | 7302  | 7373  | 7444  |       |
| 6120  | 787 7514    | 7585 | 7656 | 7727 | 7798  | 7869       | 7940  | 8011  | 8082  | 8153  |       |
| 21    | 8224        | 8295 | 8366 | 8437 | 8508  | 8579       | 8650  | 8721  | 8792  | 8863  |       |
| 22    | 8933        | 9004 | 9075 | 9146 | 9217  | 9288       | 9359  | 9430  | 9501  | 9572  |       |
| 23    | 9643        | 9714 | 9785 | 9856 | 9927  | 10000      | 10000 | 10000 | 10000 | 10000 |       |
| 24    | 787 0352    | 0423 | 0494 | 0565 | 0636  | 0707       | 0778  | 0849  | 0920  | 0991  |       |
| 25    | 1061        | 1132 | 1203 | 1274 | 1345  | 1416       | 1487  | 1558  | 1629  | 1700  |       |
| 26    | 1770        | 1841 | 1912 | 1983 | 2054  | 2125       | 2196  | 2267  | 2338  | 2409  |       |
| 27    | 2479        | 2550 | 2621 | 2692 | 2763  | 2834       | 2905  | 2976  | 3047  | 3118  |       |
| 28    | 3188        | 3259 | 3330 | 3401 | 3472  | 3543       | 3614  | 3685  | 3756  | 3827  |       |
| 29    | 3896        | 3967 | 4038 | 4109 | 4180  | 4251       | 4322  | 4393  | 4464  | 4535  |       |
| 6130  | 787 4605    | 4676 | 4747 | 4818 | 4889  | 4960       | 5031  | 5102  | 5173  | 5244  |       |
| 31    | 5313        | 5384 | 5455 | 5526 | 5597  | 5668       | 5739  | 5810  | 5881  | 5952  |       |
| 32    | 6021        | 6092 | 6163 | 6234 | 6305  | 6376       | 6447  | 6518  | 6589  | 6660  |       |
| 33    | 6730        | 6801 | 6872 | 6943 | 7014  | 7085       | 7156  | 7227  | 7298  | 7369  |       |
| 34    | 7438        | 7509 | 7580 | 7651 | 7722  | 7793       | 7864  | 7935  | 8006  | 8077  |       |
| 35    | 8146        | 8217 | 8288 | 8359 | 8430  | 8501       | 8572  | 8643  | 8714  | 8785  |       |
| 36    | 8854        | 8925 | 8996 | 9067 | 9138  | 9209       | 9280  | 9351  | 9422  | 9493  |       |
| 37    | 9561        | 9632 | 9703 | 9774 | 9845  | 9916       | 10000 | 10000 | 10000 | 10000 |       |
| 38    | 788 0269    | 0340 | 0411 | 0482 | 0553  | 0624       | 0695  | 0766  | 0837  | 0908  |       |
| 39    | 0976        | 1047 | 1118 | 1189 | 1260  | 1331       | 1402  | 1473  | 1544  | 1615  |       |
| 6140  | 788 1684    | 1755 | 1826 | 1897 | 1968  | 2039       | 2110  | 2181  | 2252  | 2323  |       |
| 41    | 2391        | 2462 | 2533 | 2604 | 2675  | 2746       | 2817  | 2888  | 2959  | 3030  |       |
| 42    | 3098        | 3169 | 3240 | 3311 | 3382  | 3453       | 3524  | 3595  | 3666  | 3737  |       |
| 43    | 3805        | 3876 | 3947 | 4018 | 4089  | 4160       | 4231  | 4302  | 4373  | 4444  |       |
| 44    | 4512        | 4583 | 4654 | 4725 | 4796  | 4867       | 4938  | 5009  | 5080  | 5151  |       |
| 45    | 5219        | 5290 | 5361 | 5432 | 5503  | 5574       | 5645  | 5716  | 5787  | 5858  |       |
| 46    | 5926        | 5997 | 6068 | 6139 | 6210  | 6281       | 6352  | 6423  | 6494  | 6565  |       |
| 47    | 6632        | 6703 | 6774 | 6845 | 6916  | 6987       | 7058  | 7129  | 7200  | 7271  |       |
| 48    | 7339        | 7410 | 7481 | 7552 | 7623  | 7694       | 7765  | 7836  | 7907  | 7978  |       |
| 49    | 8045        | 8116 | 8187 | 8258 | 8329  | 8400       | 8471  | 8542  | 8613  | 8684  |       |
| 6150  | 788 8751    | 8822 | 8893 | 8964 | 9035  | 9106       | 9177  | 9248  | 9319  | 9390  |       |
| N.    | 0           | 1    | 2    | 3    | 4     | 5          | 6     | 7     | 8     | 9     | P. P. |
| 61000 | 16° 56' 40" |      |      |      | 61000 | 1° 41' 40" | 8.448 | 5116  | T.    | 7015  |       |
| 61100 | 16 58 20    |      |      |      | 61100 | 1 41 30    |       | 5118  |       | 7017  |       |
| 61200 | 17 0 0      |      |      |      | 61200 | 1 42 0     |       | 5111  |       | 7023  |       |
| 61300 | 17 1 40     |      |      |      | 61300 | 1 42 10    |       | 5109  |       | 7021  |       |
| 61400 | 17 3 20     |      |      |      | 61400 | 1 42 20    |       | 5107  |       | 7021  |       |



| N.    | 0           | 1    | 2    | 3    | 4    | 5     | 6            | 7    | 8    | 9    | P. P.  |                       |
|-------|-------------|------|------|------|------|-------|--------------|------|------|------|--------|-----------------------|
| 6150  | 788 8751    | 8822 | 8892 | 8963 | 9034 | 9104  | 9175         | 9245 | 9316 | 9387 |        |                       |
| 51    | 9457        | 9528 | 9598 | 9669 | 9740 | 9810  | 9881         | 9951 | 8022 | 8093 |        |                       |
| 52    | 789 0163    | 0234 | 0304 | 0375 | 0446 | 0516  | 0587         | 0657 | 0728 | 0799 |        |                       |
| 53    | 0869        | 0940 | 1010 | 1081 | 1151 | 1222  | 1293         | 1363 | 1434 | 1504 |        |                       |
| 54    | 1575        | 1645 | 1716 | 1787 | 1857 | 1928  | 1998         | 2069 | 2139 | 2210 |        |                       |
| 55    | 2281        | 2351 | 2422 | 2492 | 2563 | 2633  | 2704         | 2774 | 2845 | 2916 |        |                       |
| 56    | 2986        | 3057 | 3127 | 3198 | 3268 | 3339  | 3409         | 3480 | 3550 | 3621 |        |                       |
| 57    | 3692        | 3762 | 3833 | 3903 | 3974 | 4044  | 4115         | 4185 | 4256 | 4326 |        |                       |
| 58    | 4397        | 4467 | 4538 | 4608 | 4679 | 4749  | 4820         | 4890 | 4961 | 5032 |        |                       |
| 59    | 5102        | 5173 | 5243 | 5314 | 5384 | 5455  | 5525         | 5596 | 5666 | 5737 |        |                       |
| 6160  | 789 5807    | 5878 | 5948 | 6019 | 6089 | 6160  | 6230         | 6301 | 6371 | 6442 |        |                       |
| 61    | 6512        | 6583 | 6653 | 6724 | 6794 | 6865  | 6935         | 7005 | 7076 | 7146 |        |                       |
| 62    | 7217        | 7287 | 7358 | 7428 | 7499 | 7569  | 7640         | 7710 | 7781 | 7851 | 1 7.1  |                       |
| 63    | 7922        | 7992 | 8063 | 8133 | 8204 | 8274  | 8344         | 8415 | 8485 | 8556 | 2 14.2 |                       |
| 64    | 8626        | 8697 | 8767 | 8838 | 8908 | 8979  | 9049         | 9119 | 9190 | 9260 | 3 21.3 |                       |
| 65    | 9331        | 9401 | 9472 | 9542 | 9613 | 9683  | 9753         | 9824 | 9894 | 9965 | 4 28.4 |                       |
| 66    | 790 0035    | 0106 | 0176 | 0247 | 0317 | 0387  | 0458         | 0528 | 0599 | 0669 | 5 35.5 |                       |
| 67    | 0739        | 0810 | 0880 | 0951 | 1021 | 1092  | 1162         | 1232 | 1303 | 1373 | 6 42.6 |                       |
| 68    | 1444        | 1514 | 1584 | 1655 | 1725 | 1796  | 1866         | 1936 | 2007 | 2077 | 7 49.7 |                       |
| 69    | 2148        | 2218 | 2288 | 2359 | 2429 | 2500  | 2570         | 2640 | 2711 | 2781 | 8 56.8 |                       |
| 6170  | 790 2852    | 2922 | 2992 | 3063 | 3133 | 3204  | 3274         | 3344 | 3415 | 3485 | 9 63.9 |                       |
| 71    | 3555        | 3626 | 3696 | 3767 | 3837 | 3907  | 3978         | 4048 | 4118 | 4189 |        |                       |
| 72    | 4259        | 4330 | 4400 | 4470 | 4541 | 4611  | 4681         | 4752 | 4822 | 4892 |        |                       |
| 73    | 4963        | 5033 | 5103 | 5174 | 5244 | 5315  | 5385         | 5455 | 5526 | 5596 |        |                       |
| 74    | 5666        | 5737 | 5807 | 5877 | 5948 | 6018  | 6088         | 6159 | 6229 | 6299 |        |                       |
| 75    | 6370        | 6440 | 6510 | 6581 | 6651 | 6721  | 6792         | 6862 | 6932 | 7003 |        |                       |
| 76    | 7073        | 7143 | 7214 | 7284 | 7354 | 7424  | 7495         | 7565 | 7635 | 7706 |        |                       |
| 77    | 7776        | 7846 | 7917 | 7987 | 8057 | 8128  | 8198         | 8268 | 8338 | 8409 |        |                       |
| 78    | 8479        | 8549 | 8620 | 8690 | 8760 | 8831  | 8901         | 8971 | 9041 | 9112 |        |                       |
| 79    | 9182        | 9252 | 9323 | 9393 | 9463 | 9533  | 9604         | 9674 | 9744 | 9814 |        |                       |
| 6180  | 790 9885    | 9955 | 8025 | 8096 | 8166 | 8236  | 8306         | 8377 | 8447 | 8517 |        |                       |
| 81    | 791 0587    | 0658 | 0728 | 0798 | 0868 | 0939  | 1009         | 1079 | 1150 | 1220 | 70     |                       |
| 82    | 1290        | 1360 | 1431 | 1501 | 1571 | 1641  | 1711         | 1782 | 1852 | 1922 | 1 7.0  |                       |
| 83    | 1992        | 2063 | 2133 | 2203 | 2273 | 2344  | 2414         | 2484 | 2554 | 2625 | 2 14.0 |                       |
| 84    | 2695        | 2765 | 2835 | 2905 | 2976 | 3046  | 3116         | 3186 | 3257 | 3327 | 3 21.0 |                       |
| 85    | 3397        | 3467 | 3537 | 3608 | 3678 | 3748  | 3818         | 3889 | 3959 | 4029 | 4 28.0 |                       |
| 86    | 4099        | 4169 | 4240 | 4310 | 4380 | 4450  | 4520         | 4591 | 4661 | 4731 | 5 35.0 |                       |
| 87    | 4801        | 4871 | 4942 | 5012 | 5082 | 5152  | 5222         | 5292 | 5363 | 5433 | 6 42.0 |                       |
| 88    | 5503        | 5573 | 5643 | 5714 | 5784 | 5854  | 5924         | 5994 | 6064 | 6135 | 7 49.0 |                       |
| 89    | 6205        | 6275 | 6345 | 6415 | 6486 | 6556  | 6626         | 6696 | 6766 | 6836 | 8 56.0 |                       |
| 6190  | 791 6906    | 6977 | 7047 | 7117 | 7187 | 7257  | 7327         | 7398 | 7468 | 7538 | 9 63.0 |                       |
| 91    | 7608        | 7678 | 7748 | 7818 | 7889 | 7959  | 8029         | 8099 | 8169 | 8239 |        |                       |
| 92    | 8309        | 8380 | 8450 | 8520 | 8590 | 8660  | 8730         | 8800 | 8871 | 8941 |        |                       |
| 93    | 9011        | 9081 | 9151 | 9221 | 9291 | 9361  | 9432         | 9502 | 9572 | 9642 |        |                       |
| 94    | 9712        | 9782 | 9852 | 9922 | 9992 | 8063  | 8133         | 8203 | 8273 | 8343 |        |                       |
| 95    | 792 0413    | 0483 | 0553 | 0623 | 0694 | 0764  | 0834         | 0904 | 0974 | 1044 |        |                       |
| 96    | 1114        | 1184 | 1254 | 1324 | 1394 | 1465  | 1535         | 1605 | 1675 | 1745 |        |                       |
| 97    | 1815        | 1885 | 1955 | 2025 | 2095 | 2165  | 2235         | 2306 | 2376 | 2446 |        |                       |
| 98    | 2516        | 2586 | 2656 | 2726 | 2796 | 2866  | 2936         | 3006 | 3076 | 3146 |        |                       |
| 99    | 3216        | 3286 | 3356 | 3427 | 3497 | 3567  | 3637         | 3707 | 3777 | 3847 |        |                       |
| 6200  | 792 3917    | 3987 | 4057 | 4127 | 4197 | 4267  | 4337         | 4407 | 4477 | 4547 |        |                       |
| N.    | 0           | 1    | 2    | 3    | 4    | 5     | 6            | 7    | 8    | 9    | P. P.  |                       |
| 61500 | = 17° 5' 0" |      |      |      |      | 61500 | = 1° 42' 30" |      |      |      |        | S. 4.685 5105 T. 7036 |
| 61600 | = 17 6 40   |      |      |      |      | 61600 | = 1 42 40    |      |      |      |        | 5103 7040             |
| 61700 | = 17 8 20   |      |      |      |      | 61700 | = 1 42 50    |      |      |      |        | 5101 7044             |
| 61800 | = 17 10 0   |      |      |      |      | 61800 | = 1 43 0     |      |      |      |        | 5099 7048             |
| 61900 | = 17 11 40  |      |      |      |      | 61900 | = 1 43 10    |      |      |      |        | 5097 7053             |



| N.    | 0           | 1    | 2    | 3    | 4     | 5           | 6    | 7     | 8     | 9     | P. P. |
|-------|-------------|------|------|------|-------|-------------|------|-------|-------|-------|-------|
| 6200  | 792 3917    | 3987 | 4057 | 4127 | 4197  | 4267        | 4337 | 4407  | 4477  | 4547  |       |
| 01    | 4617        | 4687 | 4757 | 4827 | 4897  | 4967        | 5037 | 5107  | 5177  | 5247  |       |
| 02    | 5318        | 5388 | 5458 | 5528 | 5598  | 5668        | 5738 | 5808  | 5878  | 5948  |       |
| 03    | 6018        | 6088 | 6158 | 6228 | 6298  | 6368        | 6438 | 6508  | 6578  | 6648  |       |
| 04    | 6718        | 6788 | 6858 | 6928 | 6998  | 7068        | 7138 | 7208  | 7278  | 7348  |       |
| 05    | 7418        | 7488 | 7558 | 7628 | 7698  | 7768        | 7838 | 7908  | 7978  | 8048  |       |
| 06    | 8118        | 8188 | 8258 | 8328 | 8398  | 8468        | 8538 | 8608  | 8678  | 8748  |       |
| 07    | 8817        | 8887 | 8957 | 9027 | 9097  | 9167        | 9237 | 9307  | 9377  | 9447  |       |
| 08    | 9517        | 9587 | 9657 | 9727 | 9797  | 9867        | 9937 | 10007 | 10077 | 10147 |       |
| 09    | 793 0217    | 0287 | 0357 | 0427 | 0497  | 0567        | 0637 | 0707  | 0777  | 0847  |       |
| 6210  | 793 0916    | 0986 | 1056 | 1126 | 1196  | 1266        | 1336 | 1406  | 1476  | 1546  |       |
| 11    | 1615        | 1685 | 1755 | 1825 | 1895  | 1965        | 2035 | 2105  | 2175  | 2245  | 21    |
| 12    | 2314        | 2384 | 2454 | 2524 | 2594  | 2664        | 2734 | 2804  | 2874  | 2944  |       |
| 13    | 3014        | 3084 | 3154 | 3224 | 3294  | 3364        | 3434 | 3504  | 3574  | 3644  |       |
| 14    | 3712        | 3782 | 3852 | 3922 | 3992  | 4062        | 4132 | 4202  | 4272  | 4342  |       |
| 15    | 4411        | 4481 | 4551 | 4621 | 4691  | 4761        | 4831 | 4901  | 4971  | 5041  |       |
| 16    | 5110        | 5180 | 5250 | 5320 | 5390  | 5460        | 5530 | 5600  | 5670  | 5740  |       |
| 17    | 5839        | 5879 | 5918 | 6018 | 6058  | 6098        | 6138 | 6178  | 6218  | 6258  |       |
| 18    | 6307        | 6347 | 6387 | 6427 | 6467  | 6507        | 6547 | 6587  | 6627  | 6667  |       |
| 19    | 7206        | 7275 | 7345 | 7415 | 7485  | 7555        | 7625 | 7695  | 7765  | 7835  |       |
| 6220  | 793 7904    | 7974 | 8044 | 8114 | 8184  | 8254        | 8324 | 8394  | 8464  | 8534  |       |
| 21    | 8602        | 8672 | 8742 | 8811 | 8881  | 8951        | 9021 | 9091  | 9161  | 9231  |       |
| 22    | 9300        | 9370 | 9440 | 9510 | 9579  | 9649        | 9719 | 9789  | 9859  | 9929  |       |
| 23    | 9998        | 0068 | 0138 | 0207 | 0277  | 0347        | 0417 | 0487  | 0557  | 0627  |       |
| 24    | 794 0696    | 0766 | 0835 | 0905 | 0975  | 1045        | 1115 | 1185  | 1255  | 1325  |       |
| 25    | 1394        | 1464 | 1534 | 1604 | 1674  | 1744        | 1814 | 1884  | 1954  | 2024  |       |
| 26    | 2091        | 2161 | 2231 | 2300 | 2370  | 2440        | 2510 | 2580  | 2650  | 2720  |       |
| 27    | 2789        | 2858 | 2928 | 2998 | 3068  | 3138        | 3208 | 3278  | 3348  | 3418  |       |
| 28    | 3486        | 3556 | 3626 | 3695 | 3765  | 3835        | 3905 | 3975  | 4045  | 4115  |       |
| 29    | 4183        | 4253 | 4323 | 4392 | 4462  | 4532        | 4602 | 4672  | 4742  | 4812  |       |
| 6230  | 794 4880    | 4950 | 5020 | 5090 | 5160  | 5230        | 5300 | 5370  | 5440  | 5510  |       |
| 31    | 5578        | 5647 | 5717 | 5787 | 5856  | 5926        | 5996 | 6066  | 6136  | 6206  |       |
| 32    | 6274        | 6344 | 6414 | 6484 | 6554  | 6624        | 6694 | 6764  | 6834  | 6904  |       |
| 33    | 6971        | 7041 | 7111 | 7180 | 7250  | 7320        | 7390 | 7460  | 7530  | 7600  |       |
| 34    | 7668        | 7738 | 7807 | 7877 | 7947  | 8016        | 8086 | 8156  | 8226  | 8296  |       |
| 35    | 8365        | 8434 | 8504 | 8574 | 8644  | 8714        | 8784 | 8854  | 8924  | 8994  |       |
| 36    | 9061        | 9131 | 9200 | 9270 | 9340  | 9410        | 9480 | 9550  | 9620  | 9690  |       |
| 37    | 9757        | 9827 | 9897 | 9966 | 0036  | 0106        | 0176 | 0246  | 0316  | 0386  |       |
| 38    | 795 0454    | 0524 | 0593 | 0663 | 0733  | 0803        | 0873 | 0943  | 1013  | 1083  |       |
| 39    | 1150        | 1219 | 1289 | 1359 | 1428  | 1498        | 1568 | 1638  | 1708  | 1778  |       |
| 6240  | 795 1846    | 1915 | 1985 | 2055 | 2124  | 2194        | 2264 | 2334  | 2404  | 2474  |       |
| 41    | 2512        | 2581 | 2651 | 2721 | 2791  | 2861        | 2931 | 3001  | 3071  | 3141  |       |
| 42    | 3218        | 3287 | 3357 | 3426 | 3496  | 3566        | 3636 | 3706  | 3776  | 3846  |       |
| 43    | 3933        | 4003 | 4072 | 4142 | 4212  | 4282        | 4352 | 4422  | 4492  | 4562  |       |
| 44    | 4619        | 4688 | 4758 | 4828 | 4898  | 4968        | 5038 | 5108  | 5178  | 5248  |       |
| 45    | 5324        | 5394 | 5464 | 5534 | 5604  | 5674        | 5744 | 5814  | 5884  | 5954  |       |
| 46    | 6020        | 6089 | 6159 | 6228 | 6298  | 6368        | 6438 | 6508  | 6578  | 6648  |       |
| 47    | 6715        | 6785 | 6854 | 6924 | 6994  | 7064        | 7134 | 7204  | 7274  | 7344  |       |
| 48    | 7410        | 7480 | 7549 | 7619 | 7688  | 7758        | 7828 | 7898  | 7968  | 8038  |       |
| 49    | 8105        | 8175 | 8244 | 8314 | 8384  | 8454        | 8524 | 8594  | 8664  | 8734  |       |
| 6250  | 795 8800    | 8870 | 8939 | 9009 | 9078  | 9148        | 9217 | 9287  | 9357  | 9427  |       |
| N.    | 0           | 1    | 2    | 3    | 4     | 5           | 6    | 7     | 8     | 9     | P. P. |
| 61000 | 17° 13' 20" |      |      |      | 61000 | 17° 43' 00" |      |       |       |       |       |
| 62100 | 17 15 0     |      |      |      | 62100 | 17 43 30    |      |       |       |       |       |
| 62200 | 17 16 40    |      |      |      | 62200 | 17 44 00    |      |       |       |       |       |
| 62300 | 17 18 20    |      |      |      | 62300 | 17 44 30    |      |       |       |       |       |
| 62400 | 17 20 0     |      |      |      | 62400 | 17 45 00    |      |       |       |       |       |







| N.    | 0            | 1    | 2    | 3    | 4    | 5           | 6    | 7        | 8    | 9       | P. P.  |
|-------|--------------|------|------|------|------|-------------|------|----------|------|---------|--------|
| 6300  | 799 3405     | 3474 | 3543 | 3612 | 3681 | 3750        | 3819 | 3888     | 3957 | 4026    |        |
| 01    | 4095         | 4164 | 4233 | 4302 | 4370 | 4439        | 4508 | 4577     | 4646 | 4715    |        |
| 02    | 4784         | 4853 | 4922 | 4991 | 5060 | 5129        | 5197 | 5266     | 5335 | 5404    |        |
| 03    | 5473         | 5542 | 5611 | 5680 | 5749 | 5818        | 5886 | 5955     | 6024 | 6093    |        |
| 04    | 6162         | 6231 | 6300 | 6369 | 6438 | 6506        | 6575 | 6644     | 6713 | 6782    |        |
| 05    | 6851         | 6920 | 6989 | 7058 | 7126 | 7195        | 7264 | 7333     | 7402 | 7471    |        |
| 06    | 7540         | 7609 | 7677 | 7746 | 7815 | 7884        | 7953 | 8022     | 8091 | 8159    |        |
| 07    | 8228         | 8297 | 8366 | 8435 | 8504 | 8573        | 8641 | 8710     | 8779 | 8848    |        |
| 08    | 8917         | 8986 | 9055 | 9123 | 9192 | 9261        | 9330 | 9399     | 9468 | 9536    |        |
| 09    | 9605         | 9674 | 9743 | 9812 | 9881 | 9949        | 0018 | 0087     | 0156 | 0225    |        |
| 6310  | 800 0294     | 0362 | 0431 | 0500 | 0569 | 0638        | 0707 | 0775     | 0844 | 0913    |        |
| 11    | 0982         | 1051 | 1119 | 1188 | 1257 | 1326        | 1395 | 1463     | 1532 | 1601    | 69     |
| 12    | 1670         | 1739 | 1808 | 1876 | 1945 | 2014        | 2083 | 2152     | 2220 | 2289    | 1 6.9  |
| 13    | 2358         | 2427 | 2495 | 2564 | 2633 | 2702        | 2771 | 2839     | 2908 | 2977    | 2 13.8 |
| 14    | 3046         | 3115 | 3183 | 3252 | 3321 | 3390        | 3458 | 3527     | 3596 | 3665    | 3 20.7 |
| 15    | 3734         | 3802 | 3871 | 3940 | 4009 | 4077        | 4146 | 4215     | 4284 | 4352    | 4 27.6 |
| 16    | 4441         | 4490 | 4559 | 4627 | 4696 | 4765        | 4834 | 4903     | 4971 | 5040    | 5 34.5 |
| 17    | 5109         | 5178 | 5246 | 5315 | 5384 | 5453        | 5521 | 5590     | 5659 | 5727    | 6 41.4 |
| 18    | 5796         | 5865 | 5934 | 6002 | 6071 | 6140        | 6209 | 6277     | 6346 | 6415    | 7 48.3 |
| 19    | 6484         | 6552 | 6621 | 6690 | 6758 | 6827        | 6896 | 6965     | 7033 | 7102    | 8 55.2 |
| 6320  | 800 7171     | 7239 | 7308 | 7377 | 7446 | 7514        | 7583 | 7652     | 7720 | 7789    | 9 62.1 |
| 21    | 7858         | 7927 | 7995 | 8064 | 8133 | 8201        | 8270 | 8339     | 8408 | 8476    |        |
| 22    | 8545         | 8614 | 8682 | 8751 | 8820 | 8888        | 8957 | 9026     | 9094 | 9163    |        |
| 23    | 9232         | 9301 | 9369 | 9438 | 9507 | 9575        | 9644 | 9713     | 9781 | 9850    |        |
| 24    | 9919         | 9987 | 0056 | 0125 | 0193 | 0262        | 0331 | 0399     | 0468 | 0537    |        |
| 25    | 801 0605     | 0674 | 0743 | 0811 | 0880 | 0949        | 1017 | 1086     | 1155 | 1223    |        |
| 26    | 1292         | 1361 | 1429 | 1498 | 1566 | 1635        | 1704 | 1772     | 1841 | 1910    |        |
| 27    | 1978         | 2047 | 2116 | 2184 | 2253 | 2322        | 2390 | 2459     | 2527 | 2596    |        |
| 28    | 2665         | 2733 | 2802 | 2871 | 2939 | 3008        | 3076 | 3145     | 3214 | 3282    |        |
| 29    | 3351         | 3420 | 3488 | 3557 | 3625 | 3694        | 3763 | 3831     | 3900 | 3968    |        |
| 6330  | 801 4037     | 4106 | 4174 | 4243 | 4312 | 4380        | 4449 | 4517     | 4586 | 4655    |        |
| 31    | 4723         | 4792 | 4860 | 4929 | 4998 | 5066        | 5135 | 5203     | 5272 | 5340    | 68     |
| 32    | 5409         | 5478 | 5546 | 5615 | 5683 | 5752        | 5821 | 5889     | 5958 | 6026    | 1 6.8  |
| 33    | 6095         | 6163 | 6232 | 6301 | 6369 | 6438        | 6506 | 6575     | 6643 | 6712    | 2 13.6 |
| 34    | 6781         | 6849 | 6918 | 6986 | 7055 | 7123        | 7192 | 7261     | 7329 | 7398    | 3 20.4 |
| 35    | 7466         | 7535 | 7603 | 7672 | 7740 | 7809        | 7878 | 7946     | 8015 | 8083    | 4 27.2 |
| 36    | 8152         | 8220 | 8289 | 8357 | 8426 | 8494        | 8563 | 8631     | 8700 | 8769    | 5 34.0 |
| 37    | 8837         | 8906 | 8974 | 9043 | 9111 | 9180        | 9248 | 9317     | 9385 | 9454    | 6 40.8 |
| 38    | 9522         | 9591 | 9659 | 9728 | 9796 | 9865        | 9933 | 0002     | 0070 | 0139    | 7 47.6 |
| 39    | 802 0208     | 0276 | 0345 | 0413 | 0482 | 0550        | 0619 | 0687     | 0756 | 0824    | 8 54.4 |
| 6340  | 802 0893     | 0961 | 1030 | 1098 | 1167 | 1235        | 1304 | 1372     | 1441 | 1509    | 9 61.2 |
| 41    | 1578         | 1646 | 1715 | 1783 | 1851 | 1920        | 1988 | 2057     | 2125 | 2194    |        |
| 42    | 2262         | 2331 | 2399 | 2468 | 2536 | 2605        | 2673 | 2742     | 2810 | 2879    |        |
| 43    | 2947         | 3016 | 3084 | 3153 | 3221 | 3289        | 3358 | 3426     | 3495 | 3563    |        |
| 44    | 3632         | 3700 | 3769 | 3837 | 3906 | 3974        | 4042 | 4111     | 4179 | 4248    |        |
| 45    | 4316         | 4385 | 4453 | 4522 | 4590 | 4658        | 4727 | 4795     | 4864 | 4932    |        |
| 46    | 5001         | 5069 | 5138 | 5206 | 5274 | 5343        | 5411 | 5480     | 5548 | 5617    |        |
| 47    | 5685         | 5753 | 5822 | 5890 | 5959 | 6027        | 6096 | 6164     | 6232 | 6301    |        |
| 48    | 6369         | 6438 | 6506 | 6574 | 6643 | 6711        | 6780 | 6848     | 6916 | 6985    |        |
| 49    | 7053         | 7122 | 7190 | 7258 | 7327 | 7395        | 7464 | 7532     | 7600 | 7669    |        |
| 6350  | 802 7737     | 7806 | 7874 | 7942 | 8011 | 8079        | 8148 | 8216     | 8284 | 8353    |        |
| N.    | 0            | 1    | 2    | 3    | 4    | 5           | 6    | 7        | 8    | 9       | P. P.  |
| 63000 | = 17° 30' 0" |      |      |      | 6300 | = 1° 45' 0" |      | S. 4.685 | 5073 | T. 7099 |        |
| 63100 | = 17 31 40   |      |      |      | 6310 | = 1 45 10   |      |          | 5071 | 7104    |        |
| 63200 | = 17 33 20   |      |      |      | 6320 | = 1 45 20   |      |          | 5069 | 7108    |        |
| 63300 | = 17 35 0    |      |      |      | 6330 | = 1 45 30   |      |          | 5067 | 7112    |        |
| 63400 | = 17 36 40   |      |      |      | 6340 | = 1 45 40   |      |          | 5065 | 7117    |        |



| N.    | 0             | 1    | 2    | 3    | 4     | 5            | 6    | 7    | 8    | 9        | P. P.        |
|-------|---------------|------|------|------|-------|--------------|------|------|------|----------|--------------|
| 6350  | 802 7737      | 7806 | 7874 | 7942 | 8011  | 8079         | 8148 | 8216 | 8284 | 8353     |              |
| 51    | 8421          | 8490 | 8558 | 8626 | 8695  | 8763         | 8831 | 8900 | 8968 | 9037     |              |
| 52    | 9105          | 9173 | 9242 | 9310 | 9378  | 9447         | 9515 | 9583 | 9652 | 9720     |              |
| 53    | 9789          | 9857 | 9925 | 9994 | 0062  | 0130         | 0199 | 0267 | 0335 | 0404     |              |
| 54    | 803 0472      | 0540 | 0609 | 0677 | 0745  | 0814         | 0882 | 0951 | 1019 | 1087     |              |
| 55    | 1156          | 1224 | 1292 | 1361 | 1429  | 1497         | 1566 | 1634 | 1702 | 1771     |              |
| 56    | 1839          | 1907 | 1976 | 2044 | 2112  | 2181         | 2249 | 2317 | 2385 | 2454     |              |
| 57    | 2522          | 2590 | 2659 | 2727 | 2795  | 2864         | 2932 | 3000 | 3069 | 3137     |              |
| 58    | 3205          | 3274 | 3342 | 3410 | 3478  | 3547         | 3615 | 3683 | 3752 | 3820     |              |
| 59    | 3888          | 3957 | 4025 | 4093 | 4161  | 4230         | 4298 | 4366 | 4435 | 4503     |              |
| 6360  | 803 4571      | 4639 | 4708 | 4776 | 4844  | 4913         | 4981 | 5049 | 5117 | 5186     |              |
| 61    | 5254          | 5322 | 5391 | 5459 | 5527  | 5595         | 5664 | 5732 | 5800 | 5868     | 68           |
| 62    | 5937          | 6005 | 6073 | 6141 | 6210  | 6278         | 6346 | 6414 | 6483 | 6551     | 1 6.8        |
| 63    | 6619          | 6687 | 6756 | 6824 | 6892  | 6960         | 7029 | 7097 | 7165 | 7233     | 2 13.6       |
| 64    | 7302          | 7370 | 7438 | 7506 | 7575  | 7643         | 7711 | 7779 | 7848 | 7916     | 3 20.4       |
| 65    | 7984          | 8052 | 8121 | 8189 | 8257  | 8325         | 8393 | 8462 | 8530 | 8598     | 4 27.2       |
| 66    | 8666          | 8735 | 8803 | 8871 | 8939  | 9007         | 9076 | 9144 | 9212 | 9280     | 5 34.0       |
| 67    | 9348          | 9417 | 9485 | 9553 | 9621  | 9690         | 9758 | 9826 | 9894 | 9962     | 6 40.8       |
| 68    | 804 0031      | 0099 | 0167 | 0235 | 0303  | 0372         | 0440 | 0508 | 0576 | 0644     | 7 47.6       |
| 69    | 0712          | 0781 | 0849 | 0917 | 0985  | 1053         | 1122 | 1190 | 1258 | 1326     | 8 54.4       |
| 6370  | 804 1394      | 1463 | 1531 | 1599 | 1667  | 1735         | 1803 | 1872 | 1940 | 2008     | 9 61.2       |
| 71    | 2076          | 2144 | 2212 | 2281 | 2349  | 2417         | 2485 | 2553 | 2621 | 2690     |              |
| 72    | 2758          | 2826 | 2894 | 2962 | 3030  | 3098         | 3167 | 3235 | 3303 | 3371     |              |
| 73    | 3439          | 3507 | 3575 | 3644 | 3712  | 3780         | 3848 | 3916 | 3984 | 4052     |              |
| 74    | 4121          | 4189 | 4257 | 4325 | 4393  | 4461         | 4529 | 4598 | 4666 | 4734     |              |
| 75    | 4802          | 4870 | 4938 | 5006 | 5074  | 5143         | 5211 | 5279 | 5347 | 5415     |              |
| 76    | 5483          | 5551 | 5619 | 5687 | 5756  | 5824         | 5892 | 5960 | 6028 | 6096     |              |
| 77    | 6164          | 6232 | 6300 | 6368 | 6437  | 6505         | 6573 | 6641 | 6709 | 6777     |              |
| 78    | 6845          | 6913 | 6981 | 7049 | 7118  | 7186         | 7254 | 7322 | 7390 | 7458     |              |
| 79    | 7526          | 7594 | 7662 | 7730 | 7798  | 7866         | 7934 | 8003 | 8071 | 8139     |              |
| 6380  | 804 8207      | 8275 | 8343 | 8411 | 8479  | 8547         | 8615 | 8683 | 8751 | 8819     |              |
| 81    | 8887          | 8956 | 9024 | 9092 | 9160  | 9228         | 9296 | 9364 | 9432 | 9500     | 67           |
| 82    | 9568          | 9636 | 9704 | 9772 | 9840  | 9908         | 9976 | 0044 | 0112 | 0180     | 1 6.7        |
| 83    | 805 0248      | 0316 | 0385 | 0453 | 0521  | 0589         | 0657 | 0725 | 0793 | 0861     | 2 13.4       |
| 84    | 0929          | 0997 | 1065 | 1133 | 1201  | 1269         | 1337 | 1405 | 1473 | 1541     | 3 20.1       |
| 85    | 1609          | 1677 | 1745 | 1813 | 1881  | 1949         | 2017 | 2085 | 2153 | 2221     | 4 26.8       |
| 86    | 2289          | 2357 | 2425 | 2493 | 2561  | 2629         | 2697 | 2765 | 2833 | 2901     | 5 33.5       |
| 87    | 2969          | 3037 | 3105 | 3173 | 3241  | 3309         | 3377 | 3445 | 3513 | 3581     | 6 40.2       |
| 88    | 3649          | 3717 | 3785 | 3853 | 3921  | 3989         | 4057 | 4125 | 4193 | 4261     | 7 46.9       |
| 89    | 4329          | 4397 | 4465 | 4533 | 4601  | 4669         | 4737 | 4805 | 4873 | 4941     | 8 53.6       |
| 6390  | 805 5009      | 5077 | 5145 | 5212 | 5280  | 5348         | 5416 | 5484 | 5552 | 5620     | 9 60.3       |
| 91    | 5688          | 5756 | 5824 | 5892 | 5960  | 6028         | 6096 | 6164 | 6232 | 6300     |              |
| 92    | 6368          | 6436 | 6504 | 6571 | 6639  | 6707         | 6775 | 6843 | 6911 | 6979     |              |
| 93    | 7047          | 7115 | 7183 | 7251 | 7319  | 7387         | 7455 | 7523 | 7590 | 7658     |              |
| 94    | 7726          | 7794 | 7862 | 7930 | 7998  | 8066         | 8134 | 8202 | 8270 | 8338     |              |
| 95    | 8405          | 8473 | 8541 | 8609 | 8677  | 8745         | 8813 | 8881 | 8949 | 9017     |              |
| 96    | 9085          | 9152 | 9220 | 9288 | 9356  | 9424         | 9492 | 9560 | 9628 | 9696     |              |
| 97    | 9764          | 9831 | 9899 | 9967 | 0035  | 0103         | 0171 | 0239 | 0307 | 0374     |              |
| 98    | 806 0442      | 0510 | 0578 | 0646 | 0714  | 0782         | 0850 | 0917 | 0985 | 1053     |              |
| 99    | 1121          | 1189 | 1257 | 1325 | 1393  | 1460         | 1528 | 1596 | 1664 | 1732     |              |
| 6400  | 806 1800      | 1868 | 1935 | 2003 | 2071  | 2139         | 2207 | 2275 | 2343 | 2410     |              |
| N.    | 0             | 1    | 2    | 3    | 4     | 5            | 6    | 7    | 8    | 9        | P. P.        |
| 63500 | = 17° 38' 20" |      |      |      | 63500 | = 1° 45' 50" |      |      |      | S. 4.685 | 5063 T. 7121 |
| 63600 | = 17 40 0     |      |      |      | 63600 | = 1 46 0     |      |      |      |          | 5060 7125    |
| 63700 | = 17 41 40    |      |      |      | 63700 | = 1 46 10    |      |      |      |          | 5058 7130    |
| 63800 | = 17 43 20    |      |      |      | 63800 | = 1 46 20    |      |      |      |          | 5056 7134    |
| 63900 | = 17 45 0     |      |      |      | 63900 | = 1 46 30    |      |      |      |          | 5054 7138    |



| N.    | 0                     | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | P. P.  |
|-------|-----------------------|------|------|------|------|------|------|------|------|------|--------|
| 6400  | 806 1800              | 1868 | 1935 | 2003 | 2071 | 2139 | 2207 | 2275 | 2343 | 2410 |        |
| 01    | 2478                  | 2546 | 2614 | 2682 | 2750 | 2817 | 2885 | 2953 | 3021 | 3089 |        |
| 02    | 3157                  | 3225 | 3292 | 3360 | 3428 | 3496 | 3564 | 3632 | 3699 | 3767 |        |
| 03    | 3835                  | 3903 | 3971 | 4038 | 4106 | 4174 | 4242 | 4310 | 4378 | 4445 |        |
| 04    | 4513                  | 4581 | 4649 | 4717 | 4784 | 4852 | 4920 | 4988 | 5056 | 5124 |        |
| 05    | 5191                  | 5259 | 5327 | 5395 | 5463 | 5530 | 5598 | 5666 | 5734 | 5802 |        |
| 06    | 5869                  | 5937 | 6005 | 6073 | 6141 | 6208 | 6276 | 6344 | 6412 | 6479 |        |
| 07    | 6547                  | 6615 | 6683 | 6751 | 6818 | 6886 | 6954 | 7022 | 7089 | 7157 |        |
| 08    | 7225                  | 7293 | 7361 | 7428 | 7496 | 7564 | 7632 | 7699 | 7767 | 7835 |        |
| 09    | 7903                  | 7970 | 8038 | 8106 | 8174 | 8242 | 8309 | 8377 | 8445 | 8513 |        |
| 6410  | 806 8580              | 8648 | 8716 | 8784 | 8851 | 8919 | 8987 | 9055 | 9122 | 9190 |        |
| 11    | 9258                  | 9326 | 9393 | 9461 | 9529 | 9596 | 9664 | 9732 | 9800 | 9867 | 68     |
| 12    | 9935                  | 0003 | 0071 | 0138 | 0206 | 0274 | 0342 | 0409 | 0477 | 0545 | 1 6.8  |
| 13    | 807 0612              | 0680 | 0748 | 0816 | 0883 | 0951 | 1019 | 1086 | 1154 | 1222 | 2 13.6 |
| 14    | 1290                  | 1357 | 1425 | 1493 | 1560 | 1628 | 1696 | 1764 | 1831 | 1899 | 3 20.4 |
| 15    | 1967                  | 2034 | 2102 | 2170 | 2237 | 2305 | 2373 | 2440 | 2508 | 2576 | 4 27.2 |
| 16    | 2644                  | 2711 | 2779 | 2847 | 2914 | 2982 | 3050 | 3117 | 3185 | 3253 | 5 34.0 |
| 17    | 3320                  | 3388 | 3456 | 3523 | 3591 | 3659 | 3726 | 3794 | 3862 | 3929 | 6 40.8 |
| 18    | 3997                  | 4065 | 4132 | 4200 | 4268 | 4335 | 4403 | 4471 | 4538 | 4606 | 7 47.6 |
| 19    | 4674                  | 4741 | 4809 | 4877 | 4944 | 5012 | 5080 | 5147 | 5215 | 5283 | 8 54.4 |
| 6420  | 807 5350              | 5418 | 5486 | 5553 | 5621 | 5689 | 5756 | 5824 | 5891 | 5959 | 9 61.2 |
| 21    | 6027                  | 6094 | 6162 | 6230 | 6297 | 6365 | 6432 | 6500 | 6568 | 6635 |        |
| 22    | 6703                  | 6771 | 6838 | 6906 | 6974 | 7041 | 7109 | 7176 | 7244 | 7312 |        |
| 23    | 7379                  | 7447 | 7514 | 7582 | 7650 | 7717 | 7785 | 7853 | 7920 | 7988 |        |
| 24    | 8055                  | 8123 | 8191 | 8258 | 8326 | 8393 | 8461 | 8529 | 8596 | 8664 |        |
| 25    | 8731                  | 8799 | 8867 | 8934 | 9002 | 9069 | 9137 | 9204 | 9272 | 9340 |        |
| 26    | 9407                  | 9475 | 9542 | 9610 | 9678 | 9745 | 9813 | 9880 | 9948 | 0015 |        |
| 27    | 808 0083              | 0151 | 0218 | 0286 | 0353 | 0421 | 0488 | 0556 | 0624 | 0691 |        |
| 28    | 0759                  | 0826 | 0894 | 0961 | 1029 | 1096 | 1164 | 1232 | 1299 | 1367 |        |
| 29    | 1434                  | 1502 | 1569 | 1637 | 1704 | 1772 | 1840 | 1907 | 1975 | 2042 |        |
| 6430  | 808 2110              | 2177 | 2245 | 2312 | 2380 | 2447 | 2515 | 2582 | 2650 | 2718 |        |
| 31    | 2785                  | 2853 | 2920 | 2988 | 3055 | 3123 | 3190 | 3258 | 3325 | 3393 | 67     |
| 32    | 3460                  | 3528 | 3595 | 3663 | 3730 | 3798 | 3865 | 3933 | 4000 | 4068 | 1 6.7  |
| 33    | 4136                  | 4203 | 4271 | 4338 | 4406 | 4473 | 4541 | 4608 | 4676 | 4743 | 2 13.4 |
| 34    | 4811                  | 4878 | 4946 | 5013 | 5081 | 5148 | 5216 | 5283 | 5351 | 5418 | 3 20.1 |
| 35    | 5486                  | 5553 | 5620 | 5688 | 5755 | 5823 | 5890 | 5958 | 6025 | 6093 | 4 26.8 |
| 36    | 6160                  | 6228 | 6295 | 6363 | 6430 | 6498 | 6565 | 6633 | 6700 | 6768 | 5 33.5 |
| 37    | 6835                  | 6903 | 6970 | 7037 | 7105 | 7172 | 7240 | 7307 | 7375 | 7442 | 6 40.2 |
| 38    | 7510                  | 7577 | 7645 | 7712 | 7780 | 7847 | 7914 | 7982 | 8049 | 8117 | 7 46.9 |
| 39    | 8184                  | 8252 | 8319 | 8387 | 8454 | 8521 | 8589 | 8656 | 8724 | 8791 | 8 53.6 |
| 6440  | 808 8859              | 8926 | 8994 | 9061 | 9128 | 9196 | 9263 | 9331 | 9398 | 9466 | 9 60.3 |
| 41    | 9533                  | 9600 | 9668 | 9735 | 9803 | 9870 | 9938 | 0005 | 0072 | 0140 |        |
| 42    | 809 0207              | 0275 | 0342 | 0409 | 0477 | 0544 | 0612 | 0679 | 0747 | 0814 |        |
| 43    | 0881                  | 0949 | 1016 | 1084 | 1151 | 1218 | 1286 | 1353 | 1421 | 1488 |        |
| 44    | 1555                  | 1623 | 1690 | 1757 | 1825 | 1892 | 1960 | 2027 | 2094 | 2162 |        |
| 45    | 2229                  | 2297 | 2364 | 2431 | 2499 | 2566 | 2634 | 2701 | 2768 | 2836 |        |
| 46    | 2903                  | 2970 | 3038 | 3105 | 3173 | 3240 | 3307 | 3375 | 3442 | 3509 |        |
| 47    | 3577                  | 3644 | 3711 | 3779 | 3846 | 3914 | 3981 | 4048 | 4116 | 4183 |        |
| 48    | 4250                  | 4318 | 4385 | 4452 | 4520 | 4587 | 4654 | 4722 | 4789 | 4856 |        |
| 49    | 4924                  | 4991 | 5058 | 5126 | 5193 | 5260 | 5328 | 5395 | 5462 | 5530 |        |
| 6450  | 809 5597              | 5664 | 5732 | 5799 | 5866 | 5934 | 6001 | 6068 | 6136 | 6203 |        |
| N.    | 0                     | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | P. P.  |
| 64000 | = 17° 46' 40"         |      |      |      |      |      |      |      |      |      |        |
| 64100 | = 17 48 20            |      |      |      |      |      |      |      |      |      |        |
| 64200 | = 17 50 0             |      |      |      |      |      |      |      |      |      |        |
| 64300 | = 17 51 40            |      |      |      |      |      |      |      |      |      |        |
| 64400 | = 17 53 20            |      |      |      |      |      |      |      |      |      |        |
| 6400  | = 1° 46' 40" S. 4.685 |      |      |      |      |      |      |      |      |      |        |
| 6410  | = 1 46 50             |      |      |      |      |      |      |      |      |      |        |
| 6420  | = 1 47 0              |      |      |      |      |      |      |      |      |      |        |
| 6430  | = 1 47 10             |      |      |      |      |      |      |      |      |      |        |
| 6440  | = 1 47 20             |      |      |      |      |      |      |      |      |      |        |
|       | S. 5052               |      |      |      |      |      |      |      |      |      |        |
|       | T. 7143               |      |      |      |      |      |      |      |      |      |        |
|       | 5050                  |      |      |      |      |      |      |      |      |      |        |
|       | 7147                  |      |      |      |      |      |      |      |      |      |        |
|       | 5047                  |      |      |      |      |      |      |      |      |      |        |
|       | 7151                  |      |      |      |      |      |      |      |      |      |        |
|       | 5045                  |      |      |      |      |      |      |      |      |      |        |
|       | 7156                  |      |      |      |      |      |      |      |      |      |        |
|       | 5043                  |      |      |      |      |      |      |      |      |      |        |
|       | 7160                  |      |      |      |      |      |      |      |      |      |        |



| N.    | 0             | 1    | 2    | 3    | 4     | 5            | 6        | 7    | 8       | 9    | P. P.  |
|-------|---------------|------|------|------|-------|--------------|----------|------|---------|------|--------|
| 6450  | 809 5597      | 5664 | 5732 | 5799 | 5866  | 5934         | 6001     | 6068 | 6136    | 6203 |        |
| 51    | 6270          | 6338 | 6405 | 6472 | 6540  | 6607         | 6674     | 6742 | 6809    | 6876 |        |
| 52    | 6944          | 7011 | 7078 | 7146 | 7213  | 7280         | 7347     | 7415 | 7482    | 7549 |        |
| 53    | 7617          | 7684 | 7751 | 7819 | 7886  | 7953         | 8020     | 8088 | 8155    | 8222 |        |
| 54    | 8290          | 8357 | 8424 | 8491 | 8559  | 8626         | 8693     | 8761 | 8828    | 8895 |        |
| 55    | 8962          | 9030 | 9097 | 9164 | 9232  | 9299         | 9366     | 9433 | 9501    | 9568 |        |
| 56    | 9635          | 9702 | 9770 | 9837 | 9904  | 9972         | 0039     | 0106 | 0173    | 0241 |        |
| 57    | 810 0308      | 0375 | 0442 | 0510 | 0577  | 0644         | 0711     | 0779 | 0846    | 0913 |        |
| 58    | 0980          | 1048 | 1115 | 1182 | 1249  | 1317         | 1384     | 1451 | 1518    | 1586 |        |
| 59    | 1653          | 1720 | 1787 | 1855 | 1922  | 1989         | 2056     | 2123 | 2191    | 2258 |        |
| 6460  | 810 2325      | 2392 | 2460 | 2527 | 2594  | 2661         | 2729     | 2796 | 2863    | 2930 |        |
| 61    | 2997          | 3065 | 3132 | 3199 | 3266  | 3333         | 3401     | 3468 | 3535    | 3602 | 67     |
| 62    | 3670          | 3737 | 3804 | 3871 | 3938  | 4006         | 4073     | 4140 | 4207    | 4274 | 1 6.7  |
| 63    | 4342          | 4409 | 4476 | 4543 | 4610  | 4678         | 4745     | 4812 | 4879    | 4946 | 2 13.4 |
| 64    | 5013          | 5081 | 5148 | 5215 | 5282  | 5349         | 5417     | 5484 | 5551    | 5618 | 3 20.1 |
| 65    | 5685          | 5752 | 5820 | 5887 | 5954  | 6021         | 6088     | 6156 | 6223    | 6290 | 4 26.8 |
| 66    | 6357          | 6424 | 6491 | 6558 | 6626  | 6693         | 6760     | 6827 | 6894    | 6961 | 5 33.5 |
| 67    | 7029          | 7096 | 7163 | 7230 | 7297  | 7364         | 7432     | 7499 | 7566    | 7633 | 6 40.2 |
| 68    | 7700          | 7767 | 7834 | 7902 | 7969  | 8036         | 8103     | 8170 | 8237    | 8304 | 7 46.9 |
| 69    | 8372          | 8439 | 8506 | 8573 | 8640  | 8707         | 8774     | 8841 | 8909    | 8976 | 8 53.6 |
| 6470  | 810 9043      | 9110 | 9177 | 9244 | 9311  | 9378         | 9446     | 9513 | 9580    | 9647 | 9 60.3 |
| 71    | 9714          | 9781 | 9848 | 9915 | 9982  | 0050         | 0117     | 0184 | 0251    | 0318 |        |
| 72    | 811 0385      | 0452 | 0519 | 0586 | 0653  | 0721         | 0788     | 0855 | 0922    | 0989 |        |
| 73    | 1056          | 1123 | 1190 | 1257 | 1324  | 1392         | 1459     | 1526 | 1593    | 1660 |        |
| 74    | 1727          | 1794 | 1861 | 1928 | 1995  | 2062         | 2129     | 2197 | 2264    | 2331 |        |
| 75    | 2398          | 2465 | 2532 | 2599 | 2666  | 2733         | 2800     | 2867 | 2934    | 3001 |        |
| 76    | 3068          | 3135 | 3203 | 3270 | 3337  | 3404         | 3471     | 3538 | 3605    | 3672 |        |
| 77    | 3739          | 3806 | 3873 | 3940 | 4007  | 4074         | 4141     | 4208 | 4275    | 4342 |        |
| 78    | 4409          | 4476 | 4544 | 4611 | 4678  | 4745         | 4812     | 4879 | 4946    | 5013 |        |
| 79    | 5080          | 5147 | 5214 | 5281 | 5348  | 5415         | 5482     | 5549 | 5616    | 5683 |        |
| 6480  | 811 5750      | 5817 | 5884 | 5951 | 6018  | 6085         | 6152     | 6219 | 6286    | 6353 |        |
| 81    | 6420          | 6487 | 6554 | 6621 | 6688  | 6755         | 6822     | 6889 | 6956    | 7023 | 66     |
| 82    | 7090          | 7157 | 7224 | 7291 | 7358  | 7425         | 7492     | 7559 | 7626    | 7693 | 1 6.6  |
| 83    | 7760          | 7827 | 7894 | 7961 | 8028  | 8095         | 8162     | 8229 | 8296    | 8363 | 2 13.2 |
| 84    | 8430          | 8497 | 8564 | 8631 | 8698  | 8765         | 8832     | 8899 | 8966    | 9033 | 3 19.8 |
| 85    | 9100          | 9167 | 9234 | 9301 | 9368  | 9435         | 9502     | 9569 | 9636    | 9702 | 4 26.4 |
| 86    | 9769          | 9836 | 9903 | 9970 | 0037  | 0104         | 0171     | 0238 | 0305    | 0372 | 5 33.0 |
| 87    | 812 0439      | 0506 | 0573 | 0640 | 0707  | 0774         | 0841     | 0908 | 0975    | 1041 | 6 39.6 |
| 88    | 1108          | 1175 | 1242 | 1309 | 1376  | 1443         | 1510     | 1577 | 1644    | 1711 | 7 46.2 |
| 89    | 1778          | 1845 | 1912 | 1979 | 2045  | 2112         | 2179     | 2246 | 2313    | 2380 | 8 52.8 |
| 6490  | 812 2447      | 2514 | 2581 | 2648 | 2715  | 2782         | 2848     | 2915 | 2982    | 3049 | 9 59.4 |
| 91    | 3116          | 3183 | 3250 | 3317 | 3384  | 3451         | 3518     | 3584 | 3651    | 3718 |        |
| 92    | 3785          | 3852 | 3919 | 3986 | 4053  | 4120         | 4186     | 4253 | 4320    | 4387 |        |
| 93    | 4454          | 4521 | 4588 | 4655 | 4722  | 4788         | 4855     | 4922 | 4989    | 5056 |        |
| 94    | 5123          | 5190 | 5257 | 5323 | 5390  | 5457         | 5524     | 5591 | 5658    | 5725 |        |
| 95    | 5792          | 5858 | 5925 | 5992 | 6059  | 6126         | 6193     | 6260 | 6326    | 6393 |        |
| 96    | 6460          | 6527 | 6594 | 6661 | 6728  | 6794         | 6861     | 6928 | 6995    | 7062 |        |
| 97    | 7129          | 7196 | 7262 | 7329 | 7396  | 7463         | 7530     | 7597 | 7663    | 7730 |        |
| 98    | 7797          | 7864 | 7931 | 7998 | 8064  | 8131         | 8198     | 8265 | 8332    | 8399 |        |
| 99    | 8465          | 8532 | 8599 | 8666 | 8733  | 8799         | 8866     | 8933 | 9000    | 9067 |        |
| 6500  | 812 9134      | 9200 | 9267 | 9334 | 9401  | 9468         | 9534     | 9601 | 9668    | 9735 |        |
| N.    | 0             | 1    | 2    | 3    | 4     | 5            | 6        | 7    | 8       | 9    | P. P.  |
| 64500 | = 17° 55' 0"  |      |      |      | 64500 | = 1° 47' 30" | S. 4.685 | 5041 | T. 7165 |      |        |
| 64600 | = 17° 56' 40" |      |      |      | 64600 | = 1° 47' 40" |          | 5039 | 7169    |      |        |
| 64700 | = 17° 58' 20" |      |      |      | 64700 | = 1° 47' 50" |          | 5036 | 7173    |      |        |
| 64800 | = 18° 0' 0"   |      |      |      | 64800 | = 1° 48' 0"  |          | 5034 | 7178    |      |        |
| 64900 | = 18° 1' 40"  |      |      |      | 64900 | = 1° 48' 10" |          | 5032 | 7182    |      |        |



| N.    | 0             | 1    | 2    | 3     | 4             | 5    | 6     | 7    | 8       | 9    | P. P.  |
|-------|---------------|------|------|-------|---------------|------|-------|------|---------|------|--------|
| 6500  | 812 9134      | 9100 | 9167 | 9334  | 9491          | 9658 | 9824  | 9991 | 0158    | 0325 |        |
| 01    | 9802          | 9868 | 9935 | 0002  | 0069          | 0136 | 0203  | 0270 | 0337    | 0404 |        |
| 02    | 813 0470      | 0536 | 0603 | 0670  | 0737          | 0804 | 0871  | 0938 | 1005    | 1072 |        |
| 03    | 1138          | 1204 | 1271 | 1338  | 1405          | 1471 | 1538  | 1605 | 1672    | 1739 |        |
| 04    | 1805          | 1872 | 1939 | 2006  | 2072          | 2139 | 2206  | 2273 | 2340    | 2407 |        |
| 05    | 2473          | 2540 | 2607 | 2673  | 2740          | 2807 | 2874  | 2941 | 3008    | 3075 |        |
| 06    | 3141          | 3207 | 3274 | 3341  | 3408          | 3474 | 3541  | 3608 | 3675    | 3742 |        |
| 07    | 3808          | 3875 | 3942 | 4008  | 4075          | 4142 | 4209  | 4276 | 4343    | 4409 |        |
| 08    | 4475          | 4542 | 4609 | 4676  | 4743          | 4809 | 4876  | 4943 | 5010    | 5077 |        |
| 09    | 5143          | 5209 | 5276 | 5343  | 5410          | 5476 | 5543  | 5610 | 5677    | 5744 |        |
| 6510  | 813 5810      | 5877 | 5943 | 6010  | 6077          | 6144 | 6210  | 6277 | 6344    | 6411 |        |
| 11    | 6477          | 6544 | 6610 | 6677  | 6744          | 6811 | 6877  | 6944 | 7011    | 7078 | 67     |
| 12    | 7144          | 7211 | 7277 | 7344  | 7411          | 7478 | 7544  | 7611 | 7678    | 7745 | 1 67 1 |
| 13    | 7811          | 7877 | 7944 | 8011  | 8078          | 8144 | 8211  | 8278 | 8345    | 8412 | 1 67 1 |
| 14    | 8478          | 8544 | 8611 | 8678  | 8745          | 8811 | 8878  | 8945 | 9012    | 9079 | 1 67 1 |
| 15    | 9144          | 9211 | 9278 | 9345  | 9411          | 9478 | 9545  | 9612 | 9679    | 9746 | 1 67 1 |
| 16    | 9811          | 9877 | 9944 | 0011  | 0078          | 0144 | 0211  | 0278 | 0345    | 0412 | 1 67 1 |
| 17    | 814 0477      | 0544 | 0610 | 0677  | 0744          | 0811 | 0878  | 0945 | 1012    | 1079 | 1 67 1 |
| 18    | 1144          | 1210 | 1277 | 1343  | 1410          | 1477 | 1544  | 1610 | 1677    | 1744 | 1 67 1 |
| 19    | 1810          | 1876 | 1943 | 2010  | 2076          | 2143 | 2210  | 2277 | 2344    | 2411 | 1 67 1 |
| 6520  | 814 2476      | 2543 | 2609 | 2676  | 2743          | 2810 | 2876  | 2943 | 3010    | 3077 |        |
| 21    | 3143          | 3209 | 3275 | 3342  | 3409          | 3475 | 3542  | 3609 | 3676    | 3743 |        |
| 22    | 3808          | 3875 | 3941 | 4008  | 4075          | 4141 | 4208  | 4275 | 4342    | 4409 |        |
| 23    | 4474          | 4540 | 4607 | 4674  | 4741          | 4807 | 4874  | 4941 | 5008    | 5075 |        |
| 24    | 5140          | 5206 | 5273 | 5339  | 5406          | 5473 | 5540  | 5606 | 5673    | 5740 |        |
| 25    | 5805          | 5872 | 5938 | 6005  | 6072          | 6138 | 6205  | 6272 | 6339    | 6406 |        |
| 26    | 6471          | 6537 | 6604 | 6670  | 6737          | 6804 | 6871  | 6937 | 7004    | 7071 |        |
| 27    | 7136          | 7203 | 7269 | 7336  | 7403          | 7469 | 7536  | 7603 | 7669    | 7736 |        |
| 28    | 7801          | 7868 | 7935 | 8001  | 8068          | 8135 | 8201  | 8268 | 8335    | 8402 |        |
| 29    | 8467          | 8533 | 8600 | 8666  | 8733          | 8800 | 8866  | 8933 | 9000    | 9067 |        |
| 6530  | 814 9134      | 9198 | 9265 | 9331  | 9398          | 9464 | 9531  | 9597 | 9664    | 9731 |        |
| 31    | 9797          | 9863 | 9930 | 9996  | 0063          | 0129 | 0196  | 0263 | 0329    | 0396 |        |
| 32    | 815 0402      | 0528 | 0595 | 0661  | 0728          | 0794 | 0861  | 0928 | 0995    | 1062 |        |
| 33    | 1127          | 1193 | 1260 | 1326  | 1393          | 1459 | 1526  | 1593 | 1659    | 1726 |        |
| 34    | 1791          | 1858 | 1924 | 1991  | 2057          | 2124 | 2191  | 2258 | 2324    | 2391 |        |
| 35    | 2456          | 2522 | 2589 | 2655  | 2722          | 2789 | 2855  | 2922 | 2989    | 3056 |        |
| 36    | 3120          | 3187 | 3253 | 3320  | 3386          | 3453 | 3520  | 3586 | 3653    | 3720 |        |
| 37    | 3785          | 3851 | 3918 | 3984  | 4051          | 4117 | 4184  | 4251 | 4317    | 4384 |        |
| 38    | 4449          | 4516 | 4582 | 4648  | 4715          | 4781 | 4848  | 4915 | 4982    | 5048 |        |
| 39    | 5113          | 5180 | 5246 | 5313  | 5379          | 5445 | 5512  | 5579 | 5645    | 5712 |        |
| 6540  | 815 5777      | 5844 | 5910 | 5977  | 6043          | 6110 | 6176  | 6243 | 6310    | 6377 |        |
| 41    | 6441          | 6508 | 6574 | 6641  | 6707          | 6774 | 6840  | 6907 | 6974    | 7041 |        |
| 42    | 7105          | 7172 | 7238 | 7305  | 7371          | 7438 | 7504  | 7571 | 7638    | 7705 |        |
| 43    | 7769          | 7836 | 7902 | 7968  | 8035          | 8101 | 8168  | 8234 | 8301    | 8368 |        |
| 44    | 8433          | 8499 | 8566 | 8632  | 8698          | 8765 | 8831  | 8898 | 8964    | 9031 |        |
| 45    | 9097          | 9163 | 9229 | 9296  | 9362          | 9428 | 9495  | 9561 | 9628    | 9695 |        |
| 46    | 9760          | 9826 | 9893 | 9959  | 0025          | 0091 | 0158  | 0225 | 0291    | 0358 |        |
| 47    | 816 0423      | 0490 | 0556 | 0622  | 0689          | 0755 | 0821  | 0888 | 0955    | 1022 |        |
| 48    | 1087          | 1153 | 1219 | 1286  | 1352          | 1418 | 1485  | 1551 | 1618    | 1685 |        |
| 49    | 1750          | 1816 | 1883 | 1949  | 2015          | 2081 | 2148  | 2215 | 2281    | 2348 |        |
| 6550  | 816 2413      | 2479 | 2546 | 2612  | 2679          | 2745 | 2811  | 2878 | 2945    | 3012 |        |
| N.    | 0             | 1    | 2    | 3     | 4             | 5    | 6     | 7    | 8       | 9    | P. P.  |
| 65000 | mm 18° 3' 20" |      |      | 65000 | mm 1° 48' 20" |      | 4 651 | 3050 | T. 2123 |      |        |
| 65100 | mm 18 5 0     |      |      | 65100 | mm 1 48 30    |      |       | 3080 | 7191    |      |        |
| 65200 | mm 18 6 40    |      |      | 65200 | mm 1 48 40    |      |       | 3085 | 7195    |      |        |
| 65300 | mm 18 8 20    |      |      | 65300 | mm 1 48 50    |      |       | 3088 | 7198    |      |        |
| 65400 | mm 18 10 0    |      |      | 65400 | mm 1 49 0     |      |       | 3091 | 7200    |      |        |



| N.   | 0        | 1             | 2    | 3    | 4     | 5            | 6        | 7    | 8       | 9    | P. P.  |
|------|----------|---------------|------|------|-------|--------------|----------|------|---------|------|--------|
| 6550 | 816 2413 | 2479          | 2546 | 2612 | 2678  | 2745         | 2811     | 2877 | 2943    | 3010 |        |
| 51   | 3076     | 3142          | 3209 | 3275 | 3341  | 3407         | 3474     | 3540 | 3606    | 3673 |        |
| 52   | 3739     | 3805          | 3871 | 3938 | 4004  | 4070         | 4137     | 4203 | 4269    | 4335 |        |
| 53   | 4402     | 4468          | 4534 | 4600 | 4667  | 4733         | 4799     | 4866 | 4932    | 4998 |        |
| 54   | 5064     | 5131          | 5197 | 5263 | 5329  | 5396         | 5462     | 5528 | 5594    | 5661 |        |
| 55   | 5727     | 5793          | 5859 | 5926 | 5992  | 6058         | 6124     | 6191 | 6257    | 6323 |        |
| 56   | 6389     | 6456          | 6522 | 6588 | 6654  | 6721         | 6787     | 6853 | 6919    | 6986 |        |
| 57   | 7052     | 7118          | 7184 | 7251 | 7317  | 7383         | 7449     | 7515 | 7582    | 7648 |        |
| 58   | 7714     | 7780          | 7847 | 7913 | 7979  | 8045         | 8111     | 8178 | 8244    | 8310 |        |
| 59   | 8376     | 8443          | 8509 | 8575 | 8641  | 8707         | 8774     | 8840 | 8906    | 8972 |        |
| 6560 | 816 9038 | 9105          | 9171 | 9237 | 9303  | 9369         | 9436     | 9502 | 9568    | 9634 |        |
| 61   | 9700     | 9767          | 9833 | 9899 | 9965  | 0031         | 0098     | 0164 | 0230    | 0296 | 66     |
| 62   | 817 0362 | 0428          | 0495 | 0561 | 0627  | 0693         | 0759     | 0826 | 0892    | 0958 | 1 6.6  |
| 63   | 1024     | 1090          | 1156 | 1223 | 1289  | 1355         | 1421     | 1487 | 1553    | 1620 | 2 13.2 |
| 64   | 1686     | 1752          | 1818 | 1884 | 1950  | 2017         | 2083     | 2149 | 2215    | 2281 | 3 19.8 |
| 65   | 2347     | 2413          | 2480 | 2546 | 2612  | 2678         | 2744     | 2810 | 2876    | 2943 | 4 26.4 |
| 66   | 3009     | 3075          | 3141 | 3207 | 3273  | 3339         | 3406     | 3472 | 3538    | 3604 | 5 33.0 |
| 67   | 3670     | 3736          | 3802 | 3869 | 3935  | 4001         | 4067     | 4133 | 4199    | 4265 | 6 39.6 |
| 68   | 4331     | 4398          | 4464 | 4530 | 4596  | 4662         | 4728     | 4794 | 4860    | 4927 | 7 46.2 |
| 69   | 4993     | 5059          | 5125 | 5191 | 5257  | 5323         | 5389     | 5455 | 5521    | 5588 | 8 52.8 |
| 6570 | 817 5654 | 5720          | 5786 | 5852 | 5918  | 5984         | 6050     | 6116 | 6182    | 6249 | 9 59.4 |
| 71   | 6315     | 6381          | 6447 | 6513 | 6579  | 6645         | 6711     | 6777 | 6843    | 6909 |        |
| 72   | 6976     | 7042          | 7108 | 7174 | 7240  | 7306         | 7372     | 7438 | 7504    | 7570 |        |
| 73   | 7636     | 7702          | 7768 | 7835 | 7901  | 7967         | 8033     | 8099 | 8165    | 8231 |        |
| 74   | 8297     | 8363          | 8429 | 8495 | 8561  | 8627         | 8693     | 8759 | 8825    | 8892 |        |
| 75   | 8958     | 9024          | 9090 | 9156 | 9222  | 9288         | 9354     | 9420 | 9486    | 9552 |        |
| 76   | 9618     | 9684          | 9750 | 9816 | 9882  | 9948         | 0014     | 0080 | 0146    | 0212 |        |
| 77   | 818 0278 | 0344          | 0410 | 0477 | 0543  | 0609         | 0675     | 0741 | 0807    | 0873 |        |
| 78   | 0939     | 1005          | 1071 | 1137 | 1203  | 1269         | 1335     | 1401 | 1467    | 1533 |        |
| 79   | 1599     | 1665          | 1731 | 1797 | 1863  | 1929         | 1995     | 2061 | 2127    | 2193 |        |
| 6580 | 818 2259 | 2325          | 2391 | 2457 | 2523  | 2589         | 2655     | 2721 | 2787    | 2853 |        |
| 81   | 2919     | 2985          | 3051 | 3117 | 3183  | 3249         | 3315     | 3381 | 3447    | 3513 | 65     |
| 82   | 3579     | 3645          | 3711 | 3777 | 3843  | 3909         | 3975     | 4041 | 4107    | 4173 | 1 6.5  |
| 83   | 4239     | 4305          | 4370 | 4436 | 4502  | 4568         | 4634     | 4700 | 4766    | 4832 | 2 13.0 |
| 84   | 4898     | 4964          | 5030 | 5096 | 5162  | 5228         | 5294     | 5360 | 5426    | 5492 | 3 19.5 |
| 85   | 5558     | 5624          | 5690 | 5756 | 5822  | 5888         | 5953     | 6019 | 6085    | 6151 | 4 26.0 |
| 86   | 6217     | 6283          | 6349 | 6415 | 6481  | 6547         | 6613     | 6679 | 6745    | 6811 | 5 32.5 |
| 87   | 6877     | 6943          | 7008 | 7074 | 7140  | 7206         | 7272     | 7338 | 7404    | 7470 | 6 39.0 |
| 88   | 7536     | 7602          | 7668 | 7734 | 7800  | 7866         | 7931     | 7997 | 8063    | 8129 | 7 45.5 |
| 89   | 8195     | 8261          | 8327 | 8393 | 8459  | 8525         | 8591     | 8656 | 8722    | 8788 | 8 52.0 |
| 6590 | 818 8854 | 8920          | 8986 | 9052 | 9118  | 9184         | 9250     | 9315 | 9381    | 9447 | 9 58.5 |
| 91   | 9513     | 9579          | 9645 | 9711 | 9777  | 9843         | 9908     | 9974 | 0040    | 0106 |        |
| 92   | 819 0172 | 0238          | 0304 | 0370 | 0436  | 0501         | 0567     | 0633 | 0699    | 0765 |        |
| 93   | 0831     | 0897          | 0962 | 1028 | 1094  | 1160         | 1226     | 1292 | 1358    | 1424 |        |
| 94   | 1489     | 1555          | 1621 | 1687 | 1753  | 1819         | 1885     | 1950 | 2016    | 2082 |        |
| 95   | 2148     | 2214          | 2280 | 2346 | 2411  | 2477         | 2543     | 2609 | 2675    | 2741 |        |
| 96   | 2806     | 2872          | 2938 | 3004 | 3070  | 3136         | 3202     | 3267 | 3333    | 3399 |        |
| 97   | 3465     | 3531          | 3597 | 3662 | 3728  | 3794         | 3860     | 3926 | 3991    | 4057 |        |
| 98   | 4123     | 4189          | 4255 | 4321 | 4386  | 4452         | 4518     | 4584 | 4650    | 4715 |        |
| 99   | 4781     | 4847          | 4913 | 4979 | 5045  | 5110         | 5176     | 5242 | 5308    | 5374 |        |
| 6600 | 819 5439 | 5505          | 5571 | 5637 | 5703  | 5768         | 5834     | 5900 | 5966    | 6032 |        |
| N.   | 0        | 1             | 2    | 3    | 4     | 5            | 6        | 7    | 8       | 9    | P. P.  |
|      | 65500    | = 18° 11' 40" |      |      | 65500 | = 1° 49' 10" | S. 4.685 | 5019 | T. 7209 |      |        |
|      | 65600    | = 18 13 20    |      |      | 65600 | = 1 49 20    |          | 5017 | 7213    |      |        |
|      | 65700    | = 18 15 0     |      |      | 65700 | = 1 49 30    |          | 5014 | 7218    |      |        |
|      | 65800    | = 18 16 40    |      |      | 65800 | = 1 49 40    |          | 5012 | 7222    |      |        |
|      | 65900    | = 18 18 20    |      |      | 65900 | = 1 49 50    |          | 5010 | 7227    |      |        |



| N.    | 0        | 1       | 2     | 3     | 4     | 5      | 6     | 7     | 8     | 9     | P. P. |
|-------|----------|---------|-------|-------|-------|--------|-------|-------|-------|-------|-------|
| 6600  | 819 5439 | 5505    | 5571  | 5637  | 5703  | 5768   | 5834  | 5900  | 5965  | 6031  |       |
| 01    | 6097     | 6163    | 6229  | 6295  | 6360  | 6426   | 6492  | 6558  | 6624  | 6689  |       |
| 02    | 6755     | 6821    | 6887  | 6953  | 7018  | 7084   | 7150  | 7216  | 7282  | 7347  |       |
| 03    | 7413     | 7479    | 7545  | 7610  | 7676  | 7742   | 7808  | 7874  | 7940  | 8006  |       |
| 04    | 8071     | 8136    | 8202  | 8268  | 8334  | 8400   | 8466  | 8532  | 8598  | 8664  |       |
| 05    | 8728     | 8794    | 8860  | 8925  | 8991  | 9057   | 9123  | 9189  | 9255  | 9321  |       |
| 06    | 9386     | 9451    | 9517  | 9583  | 9649  | 9714   | 9780  | 9846  | 9912  | 9978  |       |
| 07    | 820 0043 | 0109    | 0175  | 0240  | 0306  | 0372   | 0438  | 0504  | 0570  | 0636  |       |
| 08    | 0700     | 0766    | 0832  | 0898  | 0964  | 1030   | 1096  | 1162  | 1228  | 1294  |       |
| 09    | 1358     | 1423    | 1489  | 1555  | 1620  | 1686   | 1752  | 1818  | 1884  | 1950  |       |
| 6610  | 820 2015 | 2080    | 2146  | 2212  | 2277  | 2343   | 2409  | 2474  | 2540  | 2606  |       |
| 11    | 2672     | 2737    | 2803  | 2869  | 2934  | 3000   | 3066  | 3132  | 3198  | 3264  |       |
| 12    | 3328     | 3394    | 3460  | 3525  | 3591  | 3657   | 3723  | 3789  | 3855  | 3921  |       |
| 13    | 3985     | 4051    | 4117  | 4183  | 4248  | 4314   | 4380  | 4446  | 4512  | 4578  |       |
| 14    | 4643     | 4708    | 4774  | 4840  | 4906  | 4972   | 5038  | 5104  | 5170  | 5236  |       |
| 15    | 5298     | 5364    | 5430  | 5496  | 5562  | 5628   | 5694  | 5760  | 5826  | 5892  |       |
| 16    | 5955     | 6021    | 6086  | 6152  | 6218  | 6284   | 6350  | 6416  | 6482  | 6548  |       |
| 17    | 6611     | 6677    | 6743  | 6808  | 6874  | 6940   | 7006  | 7072  | 7138  | 7204  |       |
| 18    | 7268     | 7333    | 7399  | 7465  | 7531  | 7597   | 7663  | 7729  | 7795  | 7861  |       |
| 19    | 7924     | 7989    | 8055  | 8121  | 8186  | 8252   | 8318  | 8384  | 8450  | 8516  |       |
| 6620  | 820 8580 | 8645    | 8711  | 8777  | 8842  | 8908   | 8974  | 9040  | 9106  | 9172  |       |
| 21    | 9236     | 9301    | 9367  | 9433  | 9498  | 9564   | 9630  | 9696  | 9762  | 9828  |       |
| 22    | 9894     | 9959    | 10025 | 10091 | 10156 | 10222  | 10288 | 10354 | 10420 | 10486 |       |
| 23    | 821 0548 | 0613    | 0679  | 0744  | 0810  | 0876   | 0942  | 1008  | 1074  | 1140  |       |
| 24    | 1203     | 1269    | 1334  | 1400  | 1465  | 1531   | 1597  | 1663  | 1729  | 1795  |       |
| 25    | 1859     | 1924    | 1990  | 2055  | 2121  | 2187   | 2253  | 2319  | 2385  | 2451  |       |
| 26    | 2514     | 2580    | 2645  | 2711  | 2776  | 2842   | 2908  | 2974  | 3040  | 3106  |       |
| 27    | 3170     | 3235    | 3301  | 3366  | 3432  | 3498   | 3564  | 3630  | 3696  | 3762  |       |
| 28    | 3825     | 3891    | 3956  | 4022  | 4088  | 4154   | 4220  | 4286  | 4352  | 4418  |       |
| 29    | 4480     | 4546    | 4611  | 4677  | 4743  | 4809   | 4875  | 4941  | 5007  | 5073  |       |
| 6630  | 821 5135 | 5201    | 5266  | 5332  | 5397  | 5463   | 5529  | 5595  | 5661  | 5727  |       |
| 31    | 5790     | 5856    | 5921  | 5987  | 6053  | 6119   | 6185  | 6251  | 6317  | 6383  |       |
| 32    | 6448     | 6514    | 6579  | 6645  | 6711  | 6777   | 6843  | 6909  | 6975  | 7041  |       |
| 33    | 7109     | 7175    | 7241  | 7306  | 7372  | 7438   | 7504  | 7570  | 7636  | 7702  |       |
| 34    | 7755     | 7820    | 7886  | 7951  | 8017  | 8083   | 8149  | 8215  | 8281  | 8347  |       |
| 35    | 8409     | 8473    | 8539  | 8605  | 8671  | 8737   | 8803  | 8869  | 8935  | 9001  |       |
| 36    | 9064     | 9129    | 9195  | 9260  | 9326  | 9392   | 9458  | 9524  | 9590  | 9656  |       |
| 37    | 9718     | 9784    | 9849  | 9914  | 9980  | 10045  | 10111 | 10177 | 10243 | 10309 |       |
| 38    | 822 0372 | 0438    | 0503  | 0569  | 0634  | 0700   | 0766  | 0832  | 0898  | 0964  |       |
| 39    | 1027     | 1093    | 1158  | 1224  | 1289  | 1355   | 1421  | 1487  | 1553  | 1619  |       |
| 6640  | 822 1681 | 1746    | 1812  | 1877  | 1943  | 2009   | 2074  | 2140  | 2206  | 2272  |       |
| 41    | 2335     | 2400    | 2466  | 2531  | 2596  | 2662   | 2728  | 2794  | 2860  | 2926  |       |
| 42    | 2989     | 3054    | 3119  | 3185  | 3250  | 3316   | 3382  | 3448  | 3514  | 3580  |       |
| 43    | 3643     | 3708    | 3773  | 3839  | 3904  | 3970   | 4036  | 4102  | 4168  | 4234  |       |
| 44    | 4296     | 4362    | 4427  | 4493  | 4558  | 4624   | 4690  | 4756  | 4822  | 4888  |       |
| 45    | 4950     | 5015    | 5081  | 5146  | 5212  | 5278   | 5344  | 5410  | 5476  | 5542  |       |
| 46    | 5603     | 5669    | 5734  | 5799  | 5865  | 5931   | 5997  | 6063  | 6129  | 6195  |       |
| 47    | 6257     | 6322    | 6387  | 6453  | 6518  | 6584   | 6650  | 6716  | 6782  | 6848  |       |
| 48    | 6910     | 6975    | 7041  | 7106  | 7172  | 7238   | 7304  | 7370  | 7436  | 7502  |       |
| 49    | 7563     | 7629    | 7694  | 7759  | 7825  | 7891   | 7957  | 8023  | 8089  | 8155  |       |
| 6650  | 822 8216 | 8282    | 8347  | 8412  | 8478  | 8543   | 8609  | 8674  | 8740  | 8806  |       |
| N.    | 0        | 1       | 2     | 3     | 4     | 5      | 6     | 7     | 8     | 9     | P. P. |
| 66000 | ans      | 18° 20' | 0"    | 66000 | ans   | 1° 50' | 0"    | 8     | 4 444 | 50000 | T     |
| 66100 | ans      | 18 21   | 40    | 66100 | ans   | 1 50   | 10    | 50000 | 50000 | 50000 |       |
| 66200 | ans      | 18 23   | 20    | 66200 | ans   | 1 50   | 20    | 50000 | 50000 | 50000 |       |
| 66300 | ans      | 18 25   | 0     | 66300 | ans   | 1 50   | 30    | 50000 | 50000 | 50000 |       |
| 66400 | ans      | 18 26   | 40    | 66400 | ans   | 1 50   | 40    | 49999 | 50000 | 50000 |       |



| N.    | 0             | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     | P. P.                                    |
|-------|---------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|
| 6650  | 822 8216      | 8282  | 8347  | 8412  | 8478  | 8543  | 8608  | 8674  | 8739  | 8804  |  |
| 51    | 8869          | 8935  | 9000  | 9065  | 9131  | 9196  | 9261  | 9327  | 9392  | 9457  |  |
| 52    | 9522          | 9588  | 9653  | 9718  | 9784  | 9849  | 9914  | 9979  | 10045 | 10110 |  |
| 53    | 823 0175      | 0241  | 0306  | 0371  | 0436  | 0502  | 0567  | 0632  | 0697  | 0763  |  |
| 54    | 0828          | 0893  | 0958  | 1024  | 1089  | 1154  | 1220  | 1285  | 1350  | 1415  |  |
| 55    | 1481          | 1546  | 1611  | 1676  | 1742  | 1807  | 1872  | 1937  | 2003  | 2068  |  |
| 56    | 2133          | 2198  | 2264  | 2329  | 2394  | 2459  | 2525  | 2590  | 2655  | 2720  |  |
| 57    | 2786          | 2851  | 2916  | 2981  | 3047  | 3112  | 3177  | 3242  | 3307  | 3373  |  |
| 58    | 3438          | 3503  | 3568  | 3634  | 3699  | 3764  | 3829  | 3894  | 3960  | 4025  |  |
| 59    | 4090          | 4155  | 4221  | 4286  | 4351  | 4416  | 4481  | 4547  | 4612  | 4677  |  |
| 6660  | 823 4742      | 4808  | 4873  | 4938  | 5003  | 5068  | 5134  | 5199  | 5264  | 5329  |  |
| 61    | 5394          | 5460  | 5525  | 5590  | 5655  | 5720  | 5786  | 5851  | 5916  | 5981  | 65                                       |
| 62    | 6046          | 6111  | 6177  | 6242  | 6307  | 6372  | 6437  | 6503  | 6568  | 6633  | 1 6.5                                    |
| 63    | 6698          | 6763  | 6828  | 6894  | 6959  | 7024  | 7089  | 7154  | 7220  | 7285  | 2 13.0                                   |
| 64    | 7350          | 7415  | 7480  | 7545  | 7611  | 7676  | 7741  | 7806  | 7871  | 7936  | 3 19.5                                   |
| 65    | 8002          | 8067  | 8132  | 8197  | 8262  | 8327  | 8392  | 8458  | 8523  | 8588  | 4 26.0                                   |
| 66    | 8653          | 8718  | 8783  | 8849  | 8914  | 8979  | 9044  | 9109  | 9174  | 9239  | 5 32.5                                   |
| 67    | 9305          | 9370  | 9435  | 9500  | 9565  | 9630  | 9695  | 9761  | 9826  | 9891  | 6 39.0                                   |
| 68    | 9956          | 10021 | 10086 | 10151 | 10216 | 10282 | 10347 | 10412 | 10477 | 10542 | 7 45.5                                   |
| 69    | 824 0607      | 0672  | 0737  | 0803  | 0868  | 0933  | 0998  | 1063  | 1128  | 1193  | 8 52.0                                   |
| 6670  | 824 1258      | 1323  | 1389  | 1454  | 1519  | 1584  | 1649  | 1714  | 1779  | 1844  | 9 58.5                                   |
| 71    | 1909          | 1975  | 2040  | 2105  | 2170  | 2235  | 2300  | 2365  | 2430  | 2495  |  |
| 72    | 2560          | 2625  | 2691  | 2756  | 2821  | 2886  | 2951  | 3016  | 3081  | 3146  |  |
| 73    | 3211          | 3276  | 3341  | 3406  | 3472  | 3537  | 3602  | 3667  | 3732  | 3797  |  |
| 74    | 3862          | 3927  | 3992  | 4057  | 4122  | 4187  | 4252  | 4318  | 4383  | 4448  |  |
| 75    | 4513          | 4578  | 4643  | 4708  | 4773  | 4838  | 4903  | 4968  | 5033  | 5098  |  |
| 76    | 5163          | 5228  | 5293  | 5358  | 5423  | 5489  | 5554  | 5619  | 5684  | 5749  |  |
| 77    | 5814          | 5879  | 5944  | 6009  | 6074  | 6139  | 6204  | 6269  | 6334  | 6399  |  |
| 78    | 6464          | 6529  | 6594  | 6659  | 6724  | 6789  | 6854  | 6919  | 6984  | 7049  |  |
| 79    | 7114          | 7179  | 7244  | 7310  | 7375  | 7440  | 7505  | 7570  | 7635  | 7700  |  |
| 6680  | 824 7765      | 7830  | 7895  | 7960  | 8025  | 8090  | 8155  | 8220  | 8285  | 8350  |  |
| 81    | 8415          | 8480  | 8545  | 8610  | 8675  | 8740  | 8805  | 8870  | 8935  | 9000  | 64                                       |
| 82    | 9065          | 9130  | 9195  | 9260  | 9325  | 9390  | 9455  | 9520  | 9585  | 9650  | 1 6.4                                    |
| 83    | 9715          | 9780  | 9845  | 9910  | 9975  | 10040 | 10105 | 10170 | 10234 | 10299 | 2 12.8                                   |
| 84    | 825 0364      | 0429  | 0494  | 0559  | 0624  | 0689  | 0754  | 0819  | 0884  | 0949  | 3 19.2                                   |
| 85    | 1014          | 1079  | 1144  | 1209  | 1274  | 1339  | 1404  | 1469  | 1534  | 1599  | 4 25.6                                   |
| 86    | 1664          | 1729  | 1794  | 1859  | 1924  | 1989  | 2053  | 2118  | 2183  | 2248  | 5 32.0                                   |
| 87    | 2313          | 2378  | 2443  | 2508  | 2573  | 2638  | 2703  | 2768  | 2833  | 2898  | 6 38.4                                   |
| 88    | 2963          | 3028  | 3093  | 3157  | 3222  | 3287  | 3352  | 3417  | 3482  | 3547  | 7 44.8                                   |
| 89    | 3612          | 3677  | 3742  | 3807  | 3872  | 3937  | 4002  | 4066  | 4131  | 4196  | 8 51.2                                   |
| 6690  | 825 4261      | 4326  | 4391  | 4456  | 4521  | 4586  | 4651  | 4716  | 4780  | 4845  | 9 57.6                                   |
| 91    | 4910          | 4975  | 5040  | 5105  | 5170  | 5235  | 5300  | 5365  | 5430  | 5494  |  |
| 92    | 5559          | 5624  | 5689  | 5754  | 5819  | 5884  | 5949  | 6014  | 6078  | 6143  |  |
| 93    | 6208          | 6273  | 6338  | 6403  | 6468  | 6533  | 6598  | 6662  | 6727  | 6792  |  |
| 94    | 6857          | 6922  | 6987  | 7052  | 7117  | 7181  | 7246  | 7311  | 7376  | 7441  |  |
| 95    | 7506          | 7571  | 7636  | 7700  | 7765  | 7830  | 7895  | 7960  | 8025  | 8090  |  |
| 96    | 8154          | 8219  | 8284  | 8349  | 8414  | 8479  | 8544  | 8608  | 8673  | 8738  |  |
| 97    | 8803          | 8868  | 8933  | 8998  | 9062  | 9127  | 9192  | 9257  | 9322  | 9387  |  |
| 98    | 9451          | 9516  | 9581  | 9646  | 9711  | 9776  | 9840  | 9905  | 9970  | 10035 |  |
| 99    | 826 0100      | 0165  | 0229  | 0294  | 0359  | 0424  | 0489  | 0554  | 0618  | 0683  |  |
| 6700  | 826 0748      | 0813  | 0878  | 0942  | 1007  | 1072  | 1137  | 1202  | 1267  | 1331  |  |
| N.    | 0             | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     | P. P.                                    |
| 66500 | = 18° 28' 20" |       |       |       |       |       |       |       |       |       | 66500 = 1° 50' 50" S. 4.685 4996 T. 7254 |
| 66600 | = 18 30 0     |       |       |       |       |       |       |       |       |       | 66600 = 1 51 0 4994 7258                 |
| 66700 | = 18 31 40    |       |       |       |       |       |       |       |       |       | 66700 = 1 51 10 4992 7263                |
| 66800 | = 18 33 20    |       |       |       |       |       |       |       |       |       | 66800 = 1 51 20 4989 7267                |
| 66900 | = 18 35 0     |       |       |       |       |       |       |       |       |       | 66900 = 1 51 30 4987 7272                |







| N.    | 0            | 1     | 2     | 3     | 4     | 5            | 6        | 7     | 8       | 9     | P. P.  |
|-------|--------------|-------|-------|-------|-------|--------------|----------|-------|---------|-------|--------|
| 6750  | 829 3038     | 3102  | 3166  | 3231  | 3295  | 3359         | 3424     | 3488  | 3552    | 3617  |        |
| 51    | 3681         | 3745  | 3810  | 3874  | 3938  | 4003         | 4067     | 4131  | 4196    | 4260  |        |
| 52    | 4324         | 4389  | 4453  | 4517  | 4582  | 4646         | 4710     | 4775  | 4839    | 4903  |        |
| 53    | 4967         | 5032  | 5096  | 5160  | 5225  | 5289         | 5353     | 5418  | 5482    | 5546  |        |
| 54    | 5611         | 5675  | 5739  | 5803  | 5868  | 5932         | 5996     | 6061  | 6125    | 6189  |        |
| 55    | 6254         | 6318  | 6382  | 6446  | 6511  | 6575         | 6639     | 6704  | 6768    | 6832  |        |
| 56    | 6896         | 6961  | 7025  | 7089  | 7154  | 7218         | 7282     | 7346  | 7411    | 7475  |        |
| 57    | 7539         | 7603  | 7668  | 7732  | 7796  | 7861         | 7925     | 7989  | 8053    | 8118  |        |
| 58    | 8182         | 8246  | 8310  | 8375  | 8439  | 8503         | 8567     | 8632  | 8696    | 8760  |        |
| 59    | 8824         | 8889  | 8953  | 9017  | 9081  | 9146         | 9210     | 9274  | 9338    | 9403  |        |
| 6760  | 829 9467     | 9531  | 9595  | 9660  | 9724  | 9788         | 9852     | 9917  | 9981    | 10045 |        |
| 61    | 830 0109     | 0174  | 0238  | 0302  | 0366  | 0431         | 0495     | 0559  | 0623    | 0687  | 64     |
| 62    | 0752         | 0816  | 0880  | 0944  | 1009  | 1073         | 1137     | 1201  | 1265    | 1330  | 1 6.4  |
| 63    | 1394         | 1458  | 1522  | 1587  | 1651  | 1715         | 1779     | 1843  | 1908    | 1972  | 2 12.8 |
| 64    | 2036         | 2100  | 2164  | 2229  | 2293  | 2357         | 2421     | 2485  | 2550    | 2614  | 3 19.2 |
| 65    | 2678         | 2742  | 2806  | 2871  | 2935  | 2999         | 3063     | 3127  | 3192    | 3256  | 4 25.6 |
| 66    | 3320         | 3384  | 3448  | 3512  | 3577  | 3641         | 3705     | 3769  | 3833    | 3898  | 5 32.0 |
| 67    | 3962         | 4026  | 4090  | 4154  | 4218  | 4283         | 4347     | 4411  | 4475    | 4539  | 6 38.4 |
| 68    | 4604         | 4668  | 4732  | 4796  | 4860  | 4924         | 4988     | 5053  | 5117    | 5181  | 7 44.8 |
| 69    | 5245         | 5309  | 5373  | 5438  | 5502  | 5566         | 5630     | 5694  | 5758    | 5823  | 8 51.2 |
| 6770  | 830 5887     | 5951  | 6015  | 6079  | 6143  | 6207         | 6272     | 6336  | 6400    | 6464  | 9 57.6 |
| 71    | 6528         | 6592  | 6656  | 6721  | 6785  | 6849         | 6913     | 6977  | 7041    | 7105  |        |
| 72    | 7169         | 7234  | 7298  | 7362  | 7426  | 7490         | 7554     | 7618  | 7683    | 7747  |        |
| 73    | 7811         | 7875  | 7939  | 8003  | 8067  | 8131         | 8195     | 8260  | 8324    | 8388  |        |
| 74    | 8452         | 8516  | 8580  | 8644  | 8708  | 8772         | 8837     | 8901  | 8965    | 9029  |        |
| 75    | 9093         | 9157  | 9221  | 9285  | 9349  | 9413         | 9478     | 9542  | 9606    | 9670  |        |
| 76    | 9734         | 9798  | 9862  | 9926  | 9990  | 10054        | 10119    | 10183 | 10247   | 10311 |        |
| 77    | 831 0375     | 0439  | 0503  | 0567  | 0631  | 0695         | 0759     | 0823  | 0887    | 0952  |        |
| 78    | 1016         | 1080  | 1144  | 1208  | 1272  | 1336         | 1400     | 1464  | 1528    | 1592  |        |
| 79    | 1656         | 1720  | 1784  | 1849  | 1913  | 1977         | 2041     | 2105  | 2169    | 2233  |        |
| 6780  | 831 2297     | 2361  | 2425  | 2489  | 2553  | 2617         | 2681     | 2745  | 2809    | 2873  |        |
| 81    | 2937         | 3001  | 3066  | 3130  | 3194  | 3258         | 3322     | 3386  | 3450    | 3514  | 63     |
| 82    | 3578         | 3642  | 3706  | 3770  | 3834  | 3898         | 3962     | 4026  | 4090    | 4154  | 1 6.3  |
| 83    | 4218         | 4282  | 4346  | 4410  | 4474  | 4538         | 4602     | 4666  | 4730    | 4794  | 2 12.6 |
| 84    | 4858         | 4922  | 4986  | 5050  | 5114  | 5178         | 5242     | 5306  | 5371    | 5435  | 3 18.9 |
| 85    | 5499         | 5563  | 5627  | 5691  | 5755  | 5819         | 5883     | 5947  | 6011    | 6075  | 4 25.2 |
| 86    | 6139         | 6203  | 6267  | 6331  | 6395  | 6459         | 6523     | 6587  | 6651    | 6715  | 5 31.5 |
| 87    | 6778         | 6842  | 6906  | 6970  | 7034  | 7098         | 7162     | 7226  | 7290    | 7354  | 6 37.8 |
| 88    | 7418         | 7482  | 7546  | 7610  | 7674  | 7738         | 7802     | 7866  | 7930    | 7994  | 7 44.1 |
| 89    | 8058         | 8122  | 8186  | 8250  | 8314  | 8378         | 8442     | 8506  | 8570    | 8634  | 8 50.4 |
| 6790  | 831 8698     | 8762  | 8826  | 8890  | 8954  | 9018         | 9081     | 9145  | 9209    | 9273  | 9 56.7 |
| 91    | 9337         | 9401  | 9465  | 9529  | 9593  | 9657         | 9721     | 9785  | 9849    | 9913  |        |
| 92    | 9977         | 10041 | 10105 | 10169 | 10233 | 10296        | 10360    | 10424 | 10488   | 10552 |        |
| 93    | 832 0616     | 0680  | 0744  | 0808  | 0872  | 0936         | 1000     | 1064  | 1128    | 1192  |        |
| 94    | 1255         | 1319  | 1383  | 1447  | 1511  | 1575         | 1639     | 1703  | 1767    | 1831  |        |
| 95    | 1895         | 1959  | 2022  | 2086  | 2150  | 2214         | 2278     | 2342  | 2406    | 2470  |        |
| 96    | 2534         | 2598  | 2662  | 2725  | 2789  | 2853         | 2917     | 2981  | 3045    | 3109  |        |
| 97    | 3173         | 3237  | 3300  | 3364  | 3428  | 3492         | 3556     | 3620  | 3684    | 3748  |        |
| 98    | 3812         | 3875  | 3939  | 4003  | 4067  | 4131         | 4195     | 4259  | 4323    | 4387  |        |
| 99    | 4450         | 4514  | 4578  | 4642  | 4706  | 4770         | 4834     | 4898  | 4961    | 5025  |        |
| 6800  | 832 5089     | 5153  | 5217  | 5281  | 5345  | 5408         | 5472     | 5536  | 5600    | 5664  |        |
| N.    | 0            | 1     | 2     | 3     | 4     | 5            | 6        | 7     | 8       | 9     | P. P.  |
| 67500 | = 18° 45' 0" |       |       |       | 67500 | = 1° 52' 30" | S. 4.685 | 4973  | T. 7299 |       |        |
| 67600 | = 18 46 40   |       |       |       | 67600 | = 1 52 40    |          | 4971  | 7304    |       |        |
| 67700 | = 18 48 20   |       |       |       | 67700 | = 1 52 50    |          | 4969  | 7309    |       |        |
| 67800 | = 18 50 0    |       |       |       | 67800 | = 1 53 0     |          | 4967  | 7313    |       |        |
| 67900 | = 18 51 40   |       |       |       | 67900 | = 1 53 10    |          | 4964  | 7318    |       |        |



| N.       | 0             | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | P. P.  |
|----------|---------------|------|------|------|------|------|------|------|------|------|--------|
| 6800     | 832 5089      | 5153 | 5217 | 5281 | 5345 | 5408 | 5472 | 5536 | 5600 | 5664 |        |
| 01       | 5728          | 5792 | 5855 | 5919 | 5983 | 6047 | 6111 | 6175 | 6239 | 6302 |        |
| 02       | 6366          | 6430 | 6494 | 6558 | 6622 | 6686 | 6749 | 6813 | 6877 | 6941 |        |
| 03       | 7005          | 7069 | 7132 | 7196 | 7260 | 7324 | 7388 | 7452 | 7515 | 7579 |        |
| 04       | 7643          | 7707 | 7771 | 7835 | 7898 | 7962 | 8026 | 8090 | 8154 | 8217 |        |
| 05       | 8281          | 8345 | 8409 | 8473 | 8537 | 8600 | 8664 | 8728 | 8792 | 8856 |        |
| 06       | 8919          | 8983 | 9047 | 9111 | 9175 | 9238 | 9302 | 9366 | 9430 | 9494 |        |
| 07       | 9558          | 9621 | 9685 | 9749 | 9813 | 9877 | 9940 | 0004 | 0068 | 0132 |        |
| 08       | 833 0195      | 0259 | 0323 | 0387 | 0451 | 0515 | 0578 | 0642 | 0706 | 0770 |        |
| 09       | 0833          | 0897 | 0961 | 1025 | 1088 | 1152 | 1216 | 1280 | 1344 | 1407 |        |
| 6810     | 833 1471      | 1535 | 1599 | 1662 | 1726 | 1790 | 1854 | 1918 | 1981 | 2045 |        |
| 11       | 2109          | 2173 | 2236 | 2300 | 2364 | 2428 | 2491 | 2555 | 2619 | 2683 |        |
| 12       | 2746          | 2810 | 2874 | 2938 | 3001 | 3065 | 3129 | 3193 | 3256 | 3320 | 64     |
| 13       | 3384          | 3448 | 3511 | 3575 | 3639 | 3703 | 3766 | 3830 | 3894 | 3958 | 1 6.4  |
| 14       | 4021          | 4085 | 4149 | 4212 | 4276 | 4340 | 4404 | 4467 | 4531 | 4595 | 2 12.8 |
| 15       | 4659          | 4722 | 4786 | 4850 | 4913 | 4977 | 5041 | 5105 | 5168 | 5232 | 3 19.2 |
| 16       | 5296          | 5360 | 5423 | 5487 | 5551 | 5614 | 5678 | 5742 | 5806 | 5869 | 4 25.6 |
| 17       | 5933          | 5997 | 6060 | 6124 | 6188 | 6251 | 6315 | 6379 | 6443 | 6506 | 5 32.0 |
| 18       | 6570          | 6634 | 6697 | 6761 | 6825 | 6888 | 6952 | 7016 | 7080 | 7143 | 6 38.4 |
| 19       | 7207          | 7271 | 7334 | 7398 | 7462 | 7525 | 7589 | 7653 | 7716 | 7780 | 7 44.8 |
| 6820     | 833 7844      | 7907 | 7971 | 8035 | 8098 | 8162 | 8226 | 8289 | 8353 | 8417 | 8 51.2 |
| 21       | 8480          | 8544 | 8608 | 8672 | 8735 | 8799 | 8862 | 8926 | 8990 | 9053 | 9 57.6 |
| 22       | 9117          | 9181 | 9244 | 9308 | 9372 | 9435 | 9499 | 9563 | 9626 | 9690 |        |
| 23       | 9754          | 9817 | 9881 | 9945 | 0008 | 0072 | 0136 | 0199 | 0263 | 0327 |        |
| 24       | 834 0390      | 0454 | 0517 | 0581 | 0645 | 0708 | 0772 | 0836 | 0899 | 0963 |        |
| 25       | 1027          | 1090 | 1154 | 1217 | 1281 | 1345 | 1408 | 1472 | 1536 | 1599 |        |
| 26       | 1663          | 1726 | 1790 | 1854 | 1917 | 1981 | 2045 | 2108 | 2172 | 2235 |        |
| 27       | 2299          | 2363 | 2426 | 2490 | 2553 | 2617 | 2681 | 2744 | 2808 | 2872 |        |
| 28       | 2935          | 2999 | 3062 | 3126 | 3190 | 3253 | 3317 | 3380 | 3444 | 3508 |        |
| 29       | 3577          | 3635 | 3698 | 3762 | 3826 | 3889 | 3953 | 4016 | 4080 | 4143 |        |
| 6830     | 834 4207      | 4271 | 4334 | 4398 | 4461 | 4525 | 4589 | 4652 | 4716 | 4779 |        |
| 31       | 4843          | 4906 | 4970 | 5034 | 5097 | 5161 | 5224 | 5288 | 5351 | 5415 | 68     |
| 32       | 5479          | 5542 | 5606 | 5669 | 5733 | 5796 | 5860 | 5924 | 5987 | 6051 | 1 6.3  |
| 33       | 6114          | 6178 | 6241 | 6305 | 6368 | 6432 | 6496 | 6559 | 6623 | 6686 | 2 12.6 |
| 34       | 6750          | 6813 | 6877 | 6940 | 7004 | 7067 | 7131 | 7195 | 7258 | 7322 | 3 18.9 |
| 35       | 7385          | 7449 | 7512 | 7576 | 7639 | 7703 | 7766 | 7830 | 7893 | 7957 | 4 25.2 |
| 36       | 8021          | 8084 | 8148 | 8211 | 8275 | 8338 | 8402 | 8465 | 8529 | 8592 | 5 31.5 |
| 37       | 8656          | 8719 | 8783 | 8846 | 8910 | 8973 | 9037 | 9100 | 9164 | 9227 | 6 37.8 |
| 38       | 9291          | 9354 | 9418 | 9481 | 9545 | 9609 | 9672 | 9736 | 9799 | 9863 | 7 44.1 |
| 39       | 9926          | 9990 | 0053 | 0117 | 0180 | 0244 | 0307 | 0371 | 0434 | 0498 | 8 50.4 |
| 6840     | 835 0511      | 0625 | 0688 | 0751 | 0815 | 0878 | 0942 | 1005 | 1069 | 1132 | 9 56.7 |
| 41       | 1196          | 1259 | 1323 | 1386 | 1450 | 1513 | 1577 | 1640 | 1704 | 1767 |        |
| 42       | 1831          | 1894 | 1958 | 2021 | 2085 | 2148 | 2212 | 2275 | 2338 | 2402 |        |
| 43       | 2465          | 2529 | 2592 | 2656 | 2719 | 2783 | 2846 | 2910 | 2973 | 3037 |        |
| 44       | 3100          | 3163 | 3227 | 3290 | 3354 | 3417 | 3481 | 3544 | 3608 | 3671 |        |
| 45       | 3735          | 3798 | 3861 | 3925 | 3988 | 4052 | 4115 | 4179 | 4242 | 4306 |        |
| 46       | 4369          | 4432 | 4496 | 4559 | 4623 | 4686 | 4750 | 4813 | 4876 | 4940 |        |
| 47       | 5003          | 5067 | 5130 | 5194 | 5257 | 5320 | 5384 | 5447 | 5511 | 5574 |        |
| 48       | 5638          | 5701 | 5764 | 5828 | 5891 | 5955 | 6018 | 6081 | 6145 | 6208 |        |
| 49       | 6272          | 6335 | 6398 | 6462 | 6525 | 6589 | 6652 | 6716 | 6779 | 6842 |        |
| 6850     | 835 6906      | 6969 | 7033 | 7096 | 7159 | 7223 | 7286 | 7349 | 7413 | 7476 |        |
| N.       | 0             | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | P. P.  |
| 68000    | = 18° 53' 20" |      |      |      |      |      |      |      |      |      |        |
| 68100    | = 18 55 0     |      |      |      |      |      |      |      |      |      |        |
| 68200    | = 18 56 40    |      |      |      |      |      |      |      |      |      |        |
| 68300    | = 18 58 20    |      |      |      |      |      |      |      |      |      |        |
| 68400    | = 19 0 0      |      |      |      |      |      |      |      |      |      |        |
| 68000    | = 1° 53' 20"  |      |      |      |      |      |      |      |      |      |        |
| 68100    | = 1 53 30     |      |      |      |      |      |      |      |      |      |        |
| 68200    | = 1 53 40     |      |      |      |      |      |      |      |      |      |        |
| 68300    | = 1 53 50     |      |      |      |      |      |      |      |      |      |        |
| 68400    | = 1 54 0      |      |      |      |      |      |      |      |      |      |        |
| S. 4.685 | 4962          |      |      |      |      |      |      |      |      |      |        |
| T. 7322  | 4960          |      |      |      |      |      |      |      |      |      |        |
| 7327     | 4957          |      |      |      |      |      |      |      |      |      |        |
| 7332     | 4955          |      |      |      |      |      |      |      |      |      |        |
| 7336     | 4953          |      |      |      |      |      |      |      |      |      |        |
| 7341     |               |      |      |      |      |      |      |      |      |      |        |



| N.    | 0        | 1      | 2    | 3    | 4     | 5            | 6        | 7    | 8       | 9    | P. P.  |
|-------|----------|--------|------|------|-------|--------------|----------|------|---------|------|--------|
| 6850  | 835 6906 | 6969   | 7033 | 7096 | 7159  | 7223         | 7286     | 7349 | 7413    | 7476 |        |
| 51    | 7540     | 7603   | 7666 | 7730 | 7793  | 7857         | 7920     | 7983 | 8047    | 8110 |        |
| 52    | 8174     | 8237   | 8300 | 8364 | 8427  | 8490         | 8554     | 8617 | 8681    | 8744 |        |
| 53    | 8807     | 8871   | 8934 | 8997 | 9061  | 9124         | 9188     | 9251 | 9314    | 9378 |        |
| 54    | 9441     | 9504   | 9568 | 9631 | 9694  | 9758         | 9821     | 9885 | 9948    | 8011 |        |
| 55    | 836 0075 | 0138   | 0201 | 0265 | 0328  | 0391         | 0455     | 0518 | 0581    | 0645 |        |
| 56    | 0708     | 0771   | 0835 | 0898 | 0961  | 1025         | 1088     | 1151 | 1215    | 1278 |        |
| 57    | 1341     | 1405   | 1468 | 1531 | 1595  | 1658         | 1721     | 1785 | 1848    | 1911 |        |
| 58    | 1975     | 2038   | 2101 | 2165 | 2228  | 2291         | 2355     | 2418 | 2481    | 2545 |        |
| 59    | 2608     | 2671   | 2735 | 2798 | 2861  | 2925         | 2988     | 3051 | 3115    | 3178 |        |
| 6860  | 836 3241 | 3304   | 3368 | 3431 | 3494  | 3558         | 3621     | 3684 | 3748    | 3811 |        |
| 61    | 3874     | 3937   | 4001 | 4064 | 4127  | 4191         | 4254     | 4317 | 4381    | 4444 | 63     |
| 62    | 4507     | 4570   | 4634 | 4697 | 4760  | 4824         | 4887     | 4950 | 5013    | 5077 | 1 6.3  |
| 63    | 5140     | 5203   | 5267 | 5330 | 5393  | 5456         | 5520     | 5583 | 5646    | 5709 | 2 12.6 |
| 64    | 5773     | 5836   | 5899 | 5963 | 6026  | 6089         | 6152     | 6216 | 6279    | 6342 | 3 18.9 |
| 65    | 6405     | 6469   | 6532 | 6595 | 6658  | 6722         | 6785     | 6848 | 6911    | 6975 | 4 25.2 |
| 66    | 7038     | 7101   | 7164 | 7228 | 7291  | 7354         | 7417     | 7481 | 7544    | 7607 | 5 31.5 |
| 67    | 7670     | 7734   | 7797 | 7860 | 7923  | 7987         | 8050     | 8113 | 8176    | 8240 | 6 37.8 |
| 68    | 8303     | 8366   | 8429 | 8493 | 8556  | 8619         | 8682     | 8745 | 8809    | 8872 | 7 44.1 |
| 69    | 8935     | 8998   | 9062 | 9125 | 9188  | 9251         | 9314     | 9378 | 9441    | 9504 | 8 50.4 |
| 6870  | 836 9567 | 9631   | 9694 | 9757 | 9820  | 9883         | 9947     | 8010 | 8073    | 8136 | 9 56.7 |
| 71    | 837 0199 | 0263   | 0326 | 0389 | 0452  | 0516         | 0579     | 0642 | 0705    | 0768 |        |
| 72    | 0832     | 0895   | 0958 | 1021 | 1084  | 1147         | 1211     | 1274 | 1337    | 1400 |        |
| 73    | 1463     | 1527   | 1590 | 1653 | 1716  | 1779         | 1843     | 1906 | 1969    | 2032 |        |
| 74    | 2095     | 2158   | 2222 | 2285 | 2348  | 2411         | 2474     | 2538 | 2601    | 2664 |        |
| 75    | 2727     | 2790   | 2853 | 2917 | 2980  | 3043         | 3106     | 3169 | 3232    | 3296 |        |
| 76    | 3359     | 3422   | 3485 | 3548 | 3611  | 3674         | 3738     | 3801 | 3864    | 3927 |        |
| 77    | 3990     | 4053   | 4117 | 4180 | 4243  | 4306         | 4369     | 4432 | 4495    | 4559 |        |
| 78    | 4622     | 4685   | 4748 | 4811 | 4874  | 4937         | 5001     | 5064 | 5127    | 5190 |        |
| 79    | 5253     | 5316   | 5379 | 5442 | 5506  | 5569         | 5632     | 5695 | 5758    | 5821 |        |
| 6880  | 837 5884 | 5948   | 6011 | 6074 | 6137  | 6200         | 6263     | 6326 | 6389    | 6452 |        |
| 81    | 6516     | 6579   | 6642 | 6705 | 6768  | 6831         | 6894     | 6957 | 7020    | 7084 | 62     |
| 82    | 7147     | 7210   | 7273 | 7336 | 7399  | 7462         | 7525     | 7588 | 7652    | 7715 | 1 6.2  |
| 83    | 7778     | 7841   | 7904 | 7967 | 8030  | 8093         | 8156     | 8219 | 8282    | 8346 | 2 12.4 |
| 84    | 8409     | 8472   | 8535 | 8598 | 8661  | 8724         | 8787     | 8850 | 8913    | 8976 | 3 18.6 |
| 85    | 9039     | 9103   | 9166 | 9229 | 9292  | 9355         | 9418     | 9481 | 9544    | 9607 | 4 24.8 |
| 86    | 9670     | 9733   | 9796 | 9859 | 9922  | 9986         | 8049     | 8112 | 8175    | 8238 | 5 31.0 |
| 87    | 838 0301 | 0364   | 0427 | 0490 | 0553  | 0616         | 0679     | 0742 | 0805    | 0868 | 6 37.2 |
| 88    | 0931     | 0994   | 1057 | 1121 | 1184  | 1247         | 1310     | 1373 | 1436    | 1499 | 7 43.4 |
| 89    | 1562     | 1625   | 1688 | 1751 | 1814  | 1877         | 1940     | 2003 | 2066    | 2129 | 8 49.6 |
| 6890  | 838 2192 | 2255   | 2318 | 2381 | 2444  | 2507         | 2570     | 2633 | 2696    | 2759 | 9 55.8 |
| 91    | 2822     | 2886   | 2949 | 3012 | 3075  | 3138         | 3201     | 3264 | 3327    | 3390 |        |
| 92    | 3453     | 3516   | 3579 | 3642 | 3705  | 3768         | 3831     | 3894 | 3957    | 4020 |        |
| 93    | 4083     | 4146   | 4209 | 4272 | 4335  | 4398         | 4461     | 4524 | 4587    | 4650 |        |
| 94    | 4713     | 4776   | 4839 | 4902 | 4965  | 5028         | 5091     | 5154 | 5217    | 5280 |        |
| 95    | 5343     | 5406   | 5469 | 5532 | 5595  | 5658         | 5721     | 5784 | 5847    | 5910 |        |
| 96    | 5973     | 6036   | 6098 | 6161 | 6224  | 6287         | 6350     | 6413 | 6476    | 6539 |        |
| 97    | 6602     | 6665   | 6728 | 6791 | 6854  | 6917         | 6980     | 7043 | 7106    | 7169 |        |
| 98    | 7232     | 7295   | 7358 | 7421 | 7484  | 7547         | 7610     | 7673 | 7736    | 7798 |        |
| 99    | 7861     | 7924   | 7987 | 8050 | 8113  | 8176         | 8239     | 8302 | 8365    | 8428 |        |
| 6900  | 838 8491 | 8554   | 8617 | 8680 | 8743  | 8806         | 8869     | 8931 | 8994    | 9057 |        |
| N.    | 0        | 1      | 2    | 3    | 4     | 5            | 6        | 7    | 8       | 9    | P. P.  |
| 68500 | = 19°    | 1' 40" |      |      | 68500 | = 1° 54' 10" | S. 4.685 | 4950 | T. 7346 |      |        |
| 68600 | = 19     | 3 20   |      |      | 68600 | = 1 54 20    |          | 4948 | 7350    |      |        |
| 68700 | = 19     | 5 0    |      |      | 68700 | = 1 54 30    |          | 4946 | 7355    |      |        |
| 68800 | = 19     | 6 40   |      |      | 68800 | = 1 54 40    |          | 4943 | 7360    |      |        |
| 68900 | = 19     | 8 20   |      |      | 68900 | = 1 54 50    |          | 4941 | 7364    |      |        |



| N.    | 0            | 1    | 2    | 3    | 4     | 5           | 6    | 7    | 8    | 9        | P. P.        |
|-------|--------------|------|------|------|-------|-------------|------|------|------|----------|--------------|
| 6900  | 838 8491     | 8554 | 8617 | 8680 | 8743  | 8806        | 8869 | 8931 | 8994 | 9057     |              |
| 01    | 9120         | 9183 | 9246 | 9309 | 9372  | 9435        | 9498 | 9561 | 9624 | 9687     |              |
| 02    | 9750         | 9812 | 9875 | 9938 | 0001  | 0064        | 0127 | 0190 | 0253 | 0316     |              |
| 03    | 839 0379     | 0442 | 0505 | 0567 | 0630  | 0693        | 0756 | 0819 | 0882 | 0945     |              |
| 04    | 1008         | 1071 | 1134 | 1197 | 1259  | 1322        | 1385 | 1448 | 1511 | 1574     |              |
| 05    | 1637         | 1700 | 1763 | 1826 | 1888  | 1951        | 2014 | 2077 | 2140 | 2203     |              |
| 06    | 2266         | 2329 | 2392 | 2454 | 2517  | 2580        | 2643 | 2706 | 2769 | 2832     |              |
| 07    | 2895         | 2957 | 3020 | 3083 | 3146  | 3209        | 3272 | 3335 | 3398 | 3460     |              |
| 08    | 3523         | 3586 | 3649 | 3712 | 3775  | 3838        | 3900 | 3963 | 4026 | 4089     |              |
| 09    | 4152         | 4215 | 4278 | 4341 | 4403  | 4466        | 4529 | 4592 | 4655 | 4718     |              |
| 6910  | 839 4780     | 4843 | 4906 | 4969 | 5032  | 5095        | 5158 | 5220 | 5283 | 5346     |              |
| 11    | 5409         | 5472 | 5535 | 5597 | 5660  | 5723        | 5786 | 5849 | 5912 | 5974     | 63           |
| 12    | 6037         | 6100 | 6163 | 6226 | 6289  | 6351        | 6414 | 6477 | 6540 | 6603     | 1 6.3        |
| 13    | 6666         | 6728 | 6791 | 6854 | 6917  | 6980        | 7042 | 7105 | 7168 | 7231     | 2 12.6       |
| 14    | 7294         | 7357 | 7419 | 7482 | 7545  | 7608        | 7671 | 7733 | 7796 | 7859     | 3 18.9       |
| 15    | 7922         | 7985 | 8047 | 8110 | 8173  | 8236        | 8299 | 8361 | 8424 | 8487     | 4 25.2       |
| 16    | 8550         | 8613 | 8675 | 8738 | 8801  | 8864        | 8927 | 8989 | 9052 | 9115     | 5 31.5       |
| 17    | 9178         | 9241 | 9303 | 9366 | 9429  | 9492        | 9554 | 9617 | 9680 | 9743     | 6 37.8       |
| 18    | 9806         | 9868 | 9931 | 9994 | 0057  | 0119        | 0182 | 0245 | 0308 | 0371     | 7 44.1       |
| 19    | 840 0433     | 0496 | 0559 | 0622 | 0684  | 0747        | 0810 | 0873 | 0935 | 0998     | 8 50.4       |
| 6920  | 840 1061     | 1124 | 1186 | 1249 | 1312  | 1375        | 1437 | 1500 | 1563 | 1626     | 9 56.7       |
| 21    | 1688         | 1751 | 1814 | 1877 | 1939  | 2002        | 2065 | 2128 | 2190 | 2253     |              |
| 22    | 2316         | 2379 | 2441 | 2504 | 2567  | 2630        | 2692 | 2755 | 2818 | 2881     |              |
| 23    | 2943         | 3006 | 3069 | 3132 | 3194  | 3257        | 3320 | 3382 | 3445 | 3508     |              |
| 24    | 3571         | 3633 | 3696 | 3759 | 3821  | 3884        | 3947 | 4010 | 4072 | 4135     |              |
| 25    | 4198         | 4260 | 4323 | 4386 | 4449  | 4511        | 4574 | 4637 | 4699 | 4762     |              |
| 26    | 4825         | 4888 | 4950 | 5013 | 5076  | 5138        | 5201 | 5264 | 5326 | 5389     |              |
| 27    | 5452         | 5515 | 5577 | 5640 | 5703  | 5765        | 5828 | 5891 | 5953 | 6016     |              |
| 28    | 6079         | 6141 | 6204 | 6267 | 6330  | 6392        | 6455 | 6518 | 6580 | 6643     |              |
| 29    | 6706         | 6768 | 6831 | 6894 | 6956  | 7019        | 7082 | 7144 | 7207 | 7270     |              |
| 6930  | 840 7331     | 7395 | 7458 | 7520 | 7583  | 7646        | 7708 | 7771 | 7834 | 7896     |              |
| 31    | 7959         | 8022 | 8084 | 8147 | 8210  | 8272        | 8335 | 8398 | 8460 | 8523     | 62           |
| 32    | 8586         | 8648 | 8711 | 8773 | 8836  | 8899        | 8961 | 9024 | 9087 | 9149     | 1 6.2        |
| 33    | 9212         | 9275 | 9337 | 9400 | 9463  | 9525        | 9588 | 9650 | 9713 | 9776     | 2 12.4       |
| 34    | 9838         | 9901 | 9964 | 0026 | 0089  | 0151        | 0214 | 0277 | 0339 | 0402     | 3 18.6       |
| 35    | 841 0465     | 0527 | 0590 | 0653 | 0715  | 0778        | 0840 | 0903 | 0966 | 1028     | 4 24.8       |
| 36    | 1091         | 1153 | 1216 | 1279 | 1341  | 1404        | 1467 | 1529 | 1592 | 1654     | 5 31.0       |
| 37    | 1717         | 1780 | 1842 | 1905 | 1967  | 2030        | 2093 | 2155 | 2218 | 2280     | 6 37.2       |
| 38    | 2343         | 2406 | 2468 | 2531 | 2593  | 2656        | 2719 | 2781 | 2844 | 2906     | 7 43.4       |
| 39    | 2969         | 3031 | 3094 | 3157 | 3219  | 3282        | 3344 | 3407 | 3470 | 3532     | 8 49.6       |
| 6940  | 841 3595     | 3657 | 3720 | 3782 | 3845  | 3908        | 3970 | 4033 | 4095 | 4158     | 9 55.8       |
| 41    | 4220         | 4283 | 4346 | 4408 | 4471  | 4533        | 4596 | 4658 | 4721 | 4784     |              |
| 42    | 4846         | 4909 | 4971 | 5034 | 5096  | 5159        | 5221 | 5284 | 5347 | 5409     |              |
| 43    | 5472         | 5534 | 5597 | 5659 | 5722  | 5784        | 5847 | 5909 | 5972 | 6035     |              |
| 44    | 6097         | 6160 | 6222 | 6285 | 6347  | 6410        | 6472 | 6535 | 6597 | 6660     |              |
| 45    | 6723         | 6785 | 6848 | 6910 | 6973  | 7035        | 7098 | 7160 | 7223 | 7285     |              |
| 46    | 7348         | 7410 | 7473 | 7535 | 7598  | 7660        | 7723 | 7785 | 7848 | 7910     |              |
| 47    | 7973         | 8036 | 8098 | 8161 | 8223  | 8286        | 8348 | 8411 | 8473 | 8536     |              |
| 48    | 8598         | 8661 | 8723 | 8786 | 8848  | 8911        | 8973 | 9036 | 9098 | 9161     |              |
| 49    | 9223         | 9286 | 9348 | 9411 | 9473  | 9536        | 9598 | 9661 | 9723 | 9786     |              |
| 6950  | 841 9848     | 9911 | 9973 | 0036 | 0098  | 0160        | 0223 | 0285 | 0348 | 0410     |              |
| N.    | 0            | 1    | 2    | 3    | 4     | 5           | 6    | 7    | 8    | 9        | P. P.        |
| 69000 | = 19° 10' 0" |      |      |      | 69000 | = 1° 55' 0" |      |      |      | S. 4.685 | 4939 T. 7369 |
| 69100 | = 19 11 40   |      |      |      | 69100 | = 1 55 10   |      |      |      | 4936     | 7374         |
| 69200 | = 19 13 20   |      |      |      | 69200 | = 1 55 20   |      |      |      | 4934     | 7378         |
| 69300 | = 19 15 0    |      |      |      | 69300 | = 1 55 30   |      |      |      | 4932     | 7383         |
| 69400 | = 19 16 40   |      |      |      | 69400 | = 1 55 40   |      |      |      | 4929     | 7388         |



| N.   | 0        | 1             | 2    | 3     | 4            | 5        | 6    | 7       | 8    | 9    | P. P.  |
|------|----------|---------------|------|-------|--------------|----------|------|---------|------|------|--------|
| 6950 | 841 9848 | 9911          | 9973 | 8036  | 8098         | 8160     | 8223 | 8285    | 8348 | 8410 |        |
| 51   | 842 0473 | 0535          | 0598 | 0660  | 0723         | 0785     | 0848 | 0910    | 0973 | 1035 |        |
| 52   | 1098     | 1160          | 1223 | 1285  | 1348         | 1410     | 1472 | 1535    | 1597 | 1660 |        |
| 53   | 1722     | 1785          | 1847 | 1910  | 1972         | 2035     | 2097 | 2160    | 2222 | 2284 |        |
| 54   | 2347     | 2409          | 2472 | 2534  | 2597         | 2659     | 2722 | 2784    | 2846 | 2909 |        |
| 55   | 2971     | 3034          | 3096 | 3159  | 3221         | 3284     | 3346 | 3408    | 3471 | 3533 |        |
| 56   | 3596     | 3658          | 3721 | 3783  | 3845         | 3908     | 3970 | 4033    | 4095 | 4158 |        |
| 57   | 4220     | 4282          | 4345 | 4407  | 4470         | 4532     | 4595 | 4657    | 4719 | 4782 |        |
| 58   | 4844     | 4907          | 4969 | 5031  | 5094         | 5156     | 5219 | 5281    | 5344 | 5406 |        |
| 59   | 5468     | 5531          | 5593 | 5656  | 5718         | 5780     | 5843 | 5905    | 5968 | 6030 |        |
| 6960 | 842 6092 | 6155          | 6217 | 6280  | 6342         | 6404     | 6467 | 6529    | 6592 | 6654 | 63     |
| 61   | 6716     | 6779          | 6841 | 6904  | 6966         | 7028     | 7091 | 7153    | 7215 | 7278 | 1 6.3  |
| 62   | 7340     | 7403          | 7465 | 7527  | 7590         | 7652     | 7714 | 7777    | 7839 | 7902 | 2 12.6 |
| 63   | 7964     | 8026          | 8089 | 8151  | 8213         | 8276     | 8338 | 8401    | 8463 | 8525 | 3 18.9 |
| 64   | 8588     | 8650          | 8712 | 8775  | 8837         | 8899     | 8962 | 9024    | 9086 | 9149 | 4 25.2 |
| 65   | 9211     | 9274          | 9336 | 9398  | 9461         | 9523     | 9585 | 9648    | 9710 | 9772 | 5 31.5 |
| 66   | 9835     | 9897          | 9959 | 8022  | 8084         | 8146     | 8209 | 8271    | 8333 | 8396 | 6 37.8 |
| 67   | 843 0458 | 0520          | 0583 | 0645  | 0707         | 0770     | 0832 | 0894    | 0957 | 1019 | 7 44.1 |
| 68   | 1081     | 1144          | 1206 | 1268  | 1331         | 1393     | 1455 | 1518    | 1580 | 1642 | 8 50.4 |
| 69   | 1705     | 1767          | 1829 | 1892  | 1954         | 2016     | 2079 | 2141    | 2203 | 2265 | 9 56.7 |
| 6970 | 843 2328 | 2390          | 2452 | 2515  | 2577         | 2639     | 2702 | 2764    | 2826 | 2889 |        |
| 71   | 2951     | 3013          | 3075 | 3138  | 3200         | 3262     | 3325 | 3387    | 3449 | 3511 |        |
| 72   | 3574     | 3636          | 3698 | 3761  | 3823         | 3885     | 3948 | 4010    | 4072 | 4134 |        |
| 73   | 4197     | 4259          | 4321 | 4383  | 4446         | 4508     | 4570 | 4633    | 4695 | 4757 |        |
| 74   | 4819     | 4882          | 4944 | 5006  | 5069         | 5131     | 5193 | 5255    | 5318 | 5380 |        |
| 75   | 5442     | 5504          | 5567 | 5629  | 5691         | 5753     | 5816 | 5878    | 5940 | 6002 |        |
| 76   | 6065     | 6127          | 6189 | 6251  | 6314         | 6376     | 6438 | 6500    | 6563 | 6625 |        |
| 77   | 6687     | 6749          | 6812 | 6874  | 6936         | 6998     | 7061 | 7123    | 7185 | 7247 |        |
| 78   | 7310     | 7372          | 7434 | 7496  | 7559         | 7621     | 7683 | 7745    | 7808 | 7870 |        |
| 79   | 7932     | 7994          | 8056 | 8119  | 8181         | 8243     | 8305 | 8368    | 8430 | 8492 |        |
| 6980 | 843 8554 | 8616          | 8679 | 8741  | 8803         | 8865     | 8928 | 8990    | 9052 | 9114 | 62     |
| 81   | 9176     | 9239          | 9301 | 9363  | 9425         | 9487     | 9550 | 9612    | 9674 | 9736 | 1 6.2  |
| 82   | 9798     | 9861          | 9923 | 9985  | 8047         | 8109     | 8172 | 8234    | 8296 | 8358 | 2 12.4 |
| 83   | 844 0420 | 0483          | 0545 | 0607  | 0669         | 0731     | 0794 | 0856    | 0918 | 0980 | 3 18.6 |
| 84   | 1042     | 1104          | 1167 | 1229  | 1291         | 1353     | 1415 | 1478    | 1540 | 1602 | 4 24.8 |
| 85   | 1664     | 1726          | 1788 | 1851  | 1913         | 1975     | 2037 | 2099    | 2161 | 2224 | 5 31.0 |
| 86   | 2286     | 2348          | 2410 | 2472  | 2534         | 2597     | 2659 | 2721    | 2783 | 2845 | 6 37.2 |
| 87   | 2907     | 2970          | 3032 | 3094  | 3156         | 3218     | 3280 | 3343    | 3405 | 3467 | 7 43.4 |
| 88   | 3529     | 3591          | 3653 | 3715  | 3778         | 3840     | 3902 | 3964    | 4026 | 4088 | 8 49.6 |
| 89   | 4150     | 4213          | 4275 | 4337  | 4399         | 4461     | 4523 | 4585    | 4647 | 4710 | 9 55.8 |
| 6990 | 844 4772 | 4834          | 4896 | 4958  | 5020         | 5082     | 5145 | 5207    | 5269 | 5331 |        |
| 91   | 5393     | 5455          | 5517 | 5579  | 5642         | 5704     | 5766 | 5828    | 5890 | 5952 |        |
| 92   | 6014     | 6076          | 6138 | 6201  | 6263         | 6325     | 6387 | 6449    | 6511 | 6573 |        |
| 93   | 6635     | 6697          | 6759 | 6822  | 6884         | 6946     | 7008 | 7070    | 7132 | 7194 |        |
| 94   | 7256     | 7318          | 7380 | 7443  | 7505         | 7567     | 7629 | 7691    | 7753 | 7815 |        |
| 95   | 7877     | 7939          | 8001 | 8063  | 8126         | 8188     | 8250 | 8312    | 8374 | 8436 |        |
| 96   | 8498     | 8560          | 8622 | 8684  | 8746         | 8808     | 8870 | 8933    | 8995 | 9057 |        |
| 97   | 9119     | 9181          | 9243 | 9305  | 9367         | 9429     | 9491 | 9553    | 9615 | 9677 |        |
| 98   | 9739     | 9801          | 9863 | 9926  | 9988         | 8050     | 8112 | 8174    | 8236 | 8298 |        |
| 99   | 845 0360 | 0422          | 0484 | 0546  | 0608         | 0670     | 0732 | 0794    | 0856 | 0918 |        |
| 7000 | 845 0980 | 1042          | 1104 | 1167  | 1229         | 1291     | 1353 | 1415    | 1477 | 1539 |        |
| N.   | 0        | 1             | 2    | 3     | 4            | 5        | 6    | 7       | 8    | 9    | P. P.  |
|      | 69500    | = 19° 18' 20" |      | 69500 | = 1° 55' 50" | S. 4.685 | 4927 | T. 7393 |      |      |        |
|      | 69600    | = 19 20 0     |      | 69600 | = 1 56 0     |          | 4924 | 7397    |      |      |        |
|      | 69700    | = 19 21 40    |      | 69700 | = 1 56 10    |          | 4922 | 7402    |      |      |        |
|      | 69800    | = 19 23 20    |      | 69800 | = 1 56 20    |          | 4920 | 7407    |      |      |        |
|      | 69900    | = 19 25 0     |      | 69900 | = 1 56 30    |          | 4917 | 7412    |      |      |        |



| N.   | 0        | 1             | 2    | 3     | 4            | 5    | 6        | 7    | 8       | 9    | P. P.  |
|------|----------|---------------|------|-------|--------------|------|----------|------|---------|------|--------|
| 7000 | 845 0980 | 1042          | 1104 | 1167  | 1229         | 1291 | 1353     | 1415 | 1477    | 1539 |        |
| 01   | 1601     | 1663          | 1725 | 1787  | 1849         | 1911 | 1973     | 2035 | 2097    | 2159 |        |
| 02   | 2221     | 2283          | 2345 | 2407  | 2469         | 2531 | 2593     | 2655 | 2717    | 2779 |        |
| 03   | 2841     | 2903          | 2965 | 3027  | 3089         | 3151 | 3213     | 3275 | 3337    | 3399 |        |
| 04   | 3461     | 3523          | 3585 | 3647  | 3709         | 3771 | 3833     | 3895 | 3957    | 4019 |        |
| 05   | 4081     | 4143          | 4205 | 4267  | 4329         | 4391 | 4453     | 4515 | 4577    | 4639 |        |
| 06   | 4701     | 4763          | 4825 | 4887  | 4949         | 5011 | 5073     | 5135 | 5197    | 5259 |        |
| 07   | 5321     | 5383          | 5445 | 5507  | 5569         | 5631 | 5693     | 5755 | 5817    | 5879 |        |
| 08   | 5941     | 6003          | 6065 | 6127  | 6189         | 6251 | 6313     | 6375 | 6437    | 6499 |        |
| 09   | 6561     | 6623          | 6685 | 6746  | 6808         | 6870 | 6932     | 6994 | 7056    | 7118 |        |
| 7010 | 845 7180 | 7242          | 7304 | 7366  | 7428         | 7490 | 7552     | 7614 | 7676    | 7738 |        |
| 11   | 7800     | 7862          | 7924 | 7986  | 8047         | 8109 | 8171     | 8233 | 8295    | 8357 |        |
| 12   | 8419     | 8481          | 8543 | 8605  | 8667         | 8729 | 8791     | 8853 | 8915    | 8976 | 63     |
| 13   | 9038     | 9100          | 9162 | 9224  | 9286         | 9348 | 9410     | 9472 | 9534    | 9596 | 1 6.3  |
| 14   | 9658     | 9720          | 9781 | 9843  | 9905         | 9967 | 0029     | 0091 | 0153    | 0215 | 2 12.6 |
| 15   | 846 0277 | 0339          | 0401 | 0462  | 0524         | 0586 | 0648     | 0710 | 0772    | 0834 | 3 18.9 |
| 16   | 0896     | 0958          | 1020 | 1082  | 1143         | 1205 | 1267     | 1329 | 1391    | 1453 | 4 25.2 |
| 17   | 1515     | 1577          | 1639 | 1700  | 1762         | 1824 | 1886     | 1948 | 2010    | 2072 | 5 31.5 |
| 18   | 2134     | 2196          | 2257 | 2319  | 2381         | 2443 | 2505     | 2567 | 2629    | 2691 | 6 37.8 |
| 19   | 2752     | 2814          | 2876 | 2938  | 3000         | 3062 | 3124     | 3186 | 3247    | 3309 | 7 44.1 |
| 7020 | 846 3371 | 3433          | 3495 | 3557  | 3619         | 3680 | 3742     | 3804 | 3866    | 3928 | 8 50.4 |
| 21   | 3990     | 4052          | 4113 | 4175  | 4237         | 4299 | 4361     | 4423 | 4485    | 4546 | 9 56.7 |
| 22   | 4608     | 4670          | 4732 | 4794  | 4856         | 4917 | 4979     | 5041 | 5103    | 5165 |        |
| 23   | 5227     | 5289          | 5350 | 5412  | 5474         | 5536 | 5598     | 5660 | 5721    | 5783 |        |
| 24   | 5845     | 5907          | 5969 | 6031  | 6092         | 6154 | 6216     | 6278 | 6340    | 6401 |        |
| 25   | 6463     | 6525          | 6587 | 6649  | 6711         | 6772 | 6834     | 6896 | 6958    | 7020 |        |
| 26   | 7081     | 7143          | 7205 | 7267  | 7329         | 7391 | 7452     | 7514 | 7576    | 7638 |        |
| 27   | 7700     | 7761          | 7823 | 7885  | 7947         | 8009 | 8070     | 8132 | 8194    | 8256 |        |
| 28   | 8318     | 8379          | 8441 | 8503  | 8565         | 8626 | 8688     | 8750 | 8812    | 8874 |        |
| 29   | 8935     | 8997          | 9059 | 9121  | 9183         | 9244 | 9306     | 9368 | 9430    | 9491 |        |
| 7080 | 846 9553 | 9615          | 9677 | 9739  | 9800         | 9862 | 9924     | 9986 | 0047    | 0109 |        |
| 31   | 847 0171 | 0233          | 0295 | 0356  | 0418         | 0480 | 0542     | 0603 | 0665    | 0727 |        |
| 32   | 0789     | 0850          | 0912 | 0974  | 1036         | 1097 | 1159     | 1221 | 1283    | 1344 | 62     |
| 33   | 1406     | 1468          | 1530 | 1591  | 1653         | 1715 | 1777     | 1838 | 1900    | 1962 | 1 6.2  |
| 34   | 2024     | 2085          | 2147 | 2209  | 2271         | 2332 | 2394     | 2456 | 2518    | 2579 | 2 12.4 |
| 35   | 2641     | 2703          | 2764 | 2826  | 2888         | 2950 | 3011     | 3073 | 3135    | 3197 | 3 18.6 |
| 36   | 3258     | 3320          | 3382 | 3443  | 3505         | 3567 | 3629     | 3690 | 3752    | 3814 | 4 24.8 |
| 37   | 3876     | 3937          | 3999 | 4061  | 4122         | 4184 | 4246     | 4307 | 4369    | 4431 | 5 31.0 |
| 38   | 4493     | 4554          | 4616 | 4678  | 4739         | 4801 | 4863     | 4925 | 4986    | 5048 | 6 37.2 |
| 39   | 5110     | 5171          | 5233 | 5295  | 5356         | 5418 | 5480     | 5542 | 5603    | 5665 | 7 43.4 |
| 7040 | 847 5727 | 5788          | 5850 | 5912  | 5973         | 6035 | 6097     | 6158 | 6220    | 6282 | 8 49.6 |
| 41   | 6343     | 6405          | 6467 | 6528  | 6590         | 6652 | 6714     | 6775 | 6837    | 6899 | 9 55.8 |
| 42   | 6960     | 7022          | 7084 | 7145  | 7207         | 7269 | 7330     | 7392 | 7454    | 7515 |        |
| 43   | 7577     | 7639          | 7700 | 7762  | 7824         | 7885 | 7947     | 8009 | 8070    | 8132 |        |
| 44   | 8193     | 8255          | 8317 | 8378  | 8440         | 8502 | 8563     | 8625 | 8687    | 8748 |        |
| 45   | 8810     | 8872          | 8933 | 8995  | 9057         | 9118 | 9180     | 9241 | 9303    | 9365 |        |
| 46   | 9426     | 9488          | 9550 | 9611  | 9673         | 9735 | 9796     | 9858 | 9919    | 9981 |        |
| 47   | 848 0043 | 0104          | 0166 | 0228  | 0289         | 0351 | 0412     | 0474 | 0536    | 0597 |        |
| 48   | 0659     | 0721          | 0782 | 0844  | 0905         | 0967 | 1029     | 1090 | 1152    | 1213 |        |
| 49   | 1275     | 1337          | 1398 | 1460  | 1522         | 1583 | 1645     | 1706 | 1768    | 1830 |        |
| 7050 | 848 1891 | 1953          | 2014 | 2076  | 2138         | 2199 | 2261     | 2322 | 2384    | 2446 |        |
| N.   | 0        | 1             | 2    | 3     | 4            | 5    | 6        | 7    | 8       | 9    | P. P.  |
|      | 70000    | = 19° 26' 40" |      | 70000 | = 1° 56' 40" |      | S. 4.685 | 4915 | T. 7416 |      |        |
|      | 70100    | = 19 28 20    |      | 70100 | = 1 56 50    |      |          | 4913 | 7421    |      |        |
|      | 70200    | = 19 30 0     |      | 70200 | = 1 57 0     |      |          | 4910 | 7426    |      |        |
|      | 70300    | = 19 31 40    |      | 70300 | = 1 57 10    |      |          | 4908 | 7431    |      |        |
|      | 70400    | = 19 33 20    |      | 70400 | = 1 57 20    |      |          | 4905 | 7436    |      |        |



| N.    | 0            | 1    | 2    | 3    | 4    | 5     | 6            | 7    | 8             | 9    | P. P.   |
|-------|--------------|------|------|------|------|-------|--------------|------|---------------|------|---------|
| 7050  | 848 1891     | 1953 | 2014 | 2076 | 2138 | 2199  | 2261         | 2322 | 2384          | 2446 |         |
| 51    | 2507         | 2569 | 2630 | 2692 | 2754 | 2815  | 2877         | 2938 | 3000          | 3061 |         |
| 52    | 3123         | 3185 | 3246 | 3308 | 3369 | 3431  | 3493         | 3554 | 3616          | 3677 |         |
| 53    | 3739         | 3800 | 3862 | 3924 | 3985 | 4047  | 4108         | 4170 | 4231          | 4293 |         |
| 54    | 4355         | 4416 | 4478 | 4539 | 4601 | 4662  | 4724         | 4786 | 4847          | 4909 |         |
| 55    | 4970         | 5032 | 5093 | 5155 | 5216 | 5278  | 5340         | 5401 | 5463          | 5524 |         |
| 56    | 5586         | 5647 | 5709 | 5770 | 5832 | 5893  | 5955         | 6017 | 6078          | 6140 |         |
| 57    | 6201         | 6263 | 6324 | 6386 | 6447 | 6509  | 6570         | 6632 | 6693          | 6755 |         |
| 58    | 6817         | 6878 | 6940 | 7001 | 7063 | 7124  | 7186         | 7247 | 7309          | 7370 |         |
| 59    | 7432         | 7493 | 7555 | 7616 | 7678 | 7739  | 7801         | 7862 | 7924          | 7985 |         |
| 7060  | 848 8047     | 8109 | 8170 | 8232 | 8293 | 8355  | 8416         | 8478 | 8539          | 8601 |         |
| 61    | 8662         | 8724 | 8785 | 8847 | 8908 | 8970  | 9031         | 9093 | 9154          | 9216 | 62      |
| 62    | 9277         | 9339 | 9400 | 9462 | 9523 | 9585  | 9646         | 9708 | 9769          | 9831 | 1 6.2   |
| 63    | 9892         | 9954 | 0015 | 0077 | 0138 | 0199  | 0261         | 0322 | 0384          | 0445 | 2 12.4  |
| 64    | 849 0507     | 0568 | 0630 | 0691 | 0753 | 0814  | 0876         | 0937 | 0999          | 1060 | 3 18.6  |
| 65    | 1122         | 1183 | 1245 | 1306 | 1368 | 1429  | 1490         | 1552 | 1613          | 1675 | 4 24.8  |
| 66    | 1736         | 1798 | 1859 | 1921 | 1982 | 2044  | 2105         | 2167 | 2228          | 2289 | 5 31.0  |
| 67    | 2351         | 2412 | 2474 | 2535 | 2597 | 2658  | 2720         | 2781 | 2843          | 2904 | 6 37.2  |
| 68    | 2965         | 3027 | 3088 | 3150 | 3211 | 3273  | 3334         | 3396 | 3457          | 3518 | 7 43.4  |
| 69    | 3580         | 3641 | 3703 | 3764 | 3826 | 3887  | 3948         | 4010 | 4071          | 4133 | 8 49.6  |
| 7070  | 849 4194     | 4256 | 4317 | 4378 | 4440 | 4501  | 4563         | 4624 | 4686          | 4747 | 9 55.8  |
| 71    | 4808         | 4870 | 4931 | 4993 | 5054 | 5115  | 5177         | 5238 | 5300          | 5361 |         |
| 72    | 5423         | 5484 | 5545 | 5607 | 5668 | 5730  | 5791         | 5852 | 5914          | 5975 |         |
| 73    | 6037         | 6098 | 6159 | 6221 | 6282 | 6344  | 6405         | 6466 | 6528          | 6589 |         |
| 74    | 6651         | 6712 | 6773 | 6835 | 6896 | 6958  | 7019         | 7080 | 7142          | 7203 |         |
| 75    | 7264         | 7326 | 7387 | 7449 | 7510 | 7571  | 7633         | 7694 | 7755          | 7817 |         |
| 76    | 7878         | 7940 | 8001 | 8062 | 8124 | 8185  | 8246         | 8308 | 8369          | 8431 |         |
| 77    | 8492         | 8553 | 8615 | 8676 | 8737 | 8799  | 8860         | 8922 | 8983          | 9044 |         |
| 78    | 9106         | 9167 | 9228 | 9290 | 9351 | 9412  | 9474         | 9535 | 9596          | 9658 |         |
| 79    | 9719         | 9780 | 9842 | 9903 | 9965 | 0026  | 0087         | 0149 | 0210          | 0271 |         |
| 7080  | 850 0333     | 0394 | 0455 | 0517 | 0578 | 0639  | 0701         | 0762 | 0823          | 0885 |         |
| 81    | 0946         | 1007 | 1069 | 1130 | 1191 | 1253  | 1314         | 1375 | 1437          | 1498 | 61      |
| 82    | 1559         | 1621 | 1682 | 1743 | 1805 | 1866  | 1927         | 1988 | 2050          | 2111 | 1 6.1   |
| 83    | 2172         | 2234 | 2295 | 2356 | 2418 | 2479  | 2540         | 2602 | 2663          | 2724 | 2 12.2  |
| 84    | 2786         | 2847 | 2908 | 2969 | 3031 | 3092  | 3153         | 3215 | 3276          | 3337 | 3 18.3  |
| 85    | 3399         | 3460 | 3521 | 3582 | 3644 | 3705  | 3766         | 3828 | 3889          | 3950 | 4 24.4  |
| 86    | 4011         | 4073 | 4134 | 4195 | 4257 | 4318  | 4379         | 4440 | 4502          | 4563 | 5 30.5  |
| 87    | 4624         | 4686 | 4747 | 4808 | 4869 | 4931  | 4992         | 5053 | 5115          | 5176 | 6 36.6  |
| 88    | 5237         | 5298 | 5360 | 5421 | 5482 | 5543  | 5605         | 5666 | 5727          | 5788 | 7 42.7  |
| 89    | 5850         | 5911 | 5972 | 6034 | 6095 | 6156  | 6217         | 6279 | 6340          | 6401 | 8 48.8  |
| 7090  | 850 6462     | 6524 | 6585 | 6646 | 6707 | 6769  | 6830         | 6891 | 6952          | 7014 | 9 54.9  |
| 91    | 7075         | 7136 | 7197 | 7259 | 7320 | 7381  | 7442         | 7504 | 7565          | 7626 |         |
| 92    | 7687         | 7749 | 7810 | 7871 | 7932 | 7993  | 8055         | 8116 | 8177          | 8238 |         |
| 93    | 8300         | 8361 | 8422 | 8483 | 8545 | 8606  | 8667         | 8728 | 8789          | 8851 |         |
| 94    | 8912         | 8973 | 9034 | 9095 | 9157 | 9218  | 9279         | 9340 | 9402          | 9463 |         |
| 95    | 9524         | 9585 | 9646 | 9708 | 9769 | 9830  | 9891         | 9952 | 0014          | 0075 |         |
| 96    | 851 0136     | 0197 | 0258 | 0320 | 0381 | 0442  | 0503         | 0564 | 0626          | 0687 |         |
| 97    | 0748         | 0809 | 0870 | 0932 | 0993 | 1054  | 1115         | 1176 | 1238          | 1299 |         |
| 98    | 1360         | 1421 | 1482 | 1544 | 1605 | 1666  | 1727         | 1788 | 1849          | 1911 |         |
| 99    | 1972         | 2033 | 2094 | 2155 | 2216 | 2278  | 2339         | 2400 | 2461          | 2522 |         |
| 7100  | 851 2583     | 2645 | 2706 | 2767 | 2828 | 2889  | 2950         | 3012 | 3073          | 3134 |         |
| N.    | 0            | 1    | 2    | 3    | 4    | 5     | 6            | 7    | 8             | 9    | P. P.   |
| 70500 | = 19° 35' 0" |      |      |      |      | 70500 | = 1° 57' 30" |      | S. 4.685 4903 |      | T. 7440 |
| 70600 | = 19 36 40   |      |      |      |      | 70600 | = 1 57 40    |      | 4901          |      | 7445    |
| 70700 | = 19 38 20   |      |      |      |      | 70700 | = 1 57 50    |      | 4898          |      | 7450    |
| 70800 | = 19 40 0    |      |      |      |      | 70800 | = 1 58 0     |      | 4896          |      | 7455    |
| 70900 | = 19 41 40   |      |      |      |      | 70900 | = 1 58 10    |      | 4893          |      | 7460    |



| N.    | 0             | 1    | 2    | 3    | 4     | 5            | 6    | 7    | 8    | 9       | P. P.        |
|-------|---------------|------|------|------|-------|--------------|------|------|------|---------|--------------|
| 7100  | 851 2583      | 2645 | 2706 | 2767 | 2828  | 2889         | 2950 | 3012 | 3073 | 3134    |              |
| 01    | 3195          | 3256 | 3317 | 3379 | 3440  | 3501         | 3562 | 3623 | 3684 | 3746    |              |
| 02    | 3807          | 3868 | 3929 | 3990 | 4051  | 4112         | 4174 | 4235 | 4296 | 4357    |              |
| 03    | 4418          | 4479 | 4540 | 4602 | 4663  | 4724         | 4785 | 4846 | 4907 | 4968    |              |
| 04    | 5030          | 5091 | 5152 | 5213 | 5274  | 5335         | 5396 | 5457 | 5519 | 5580    |              |
| 05    | 5641          | 5702 | 5763 | 5824 | 5885  | 5946         | 6008 | 6069 | 6130 | 6191    |              |
| 06    | 6252          | 6313 | 6374 | 6435 | 6496  | 6558         | 6619 | 6680 | 6741 | 6802    |              |
| 07    | 6863          | 6924 | 6985 | 7046 | 7108  | 7169         | 7230 | 7291 | 7352 | 7413    |              |
| 08    | 7474          | 7535 | 7596 | 7657 | 7719  | 7780         | 7841 | 7902 | 7963 | 8024    |              |
| 09    | 8085          | 8146 | 8207 | 8268 | 8329  | 8391         | 8452 | 8513 | 8574 | 8635    |              |
| 7110  | 851 8696      | 8757 | 8818 | 8879 | 8940  | 9001         | 9062 | 9124 | 9185 | 9246    |              |
| 11    | 9307          | 9368 | 9429 | 9490 | 9551  | 9612         | 9673 | 9734 | 9795 | 9856    |              |
| 12    | 9917          | 9979 | 0040 | 0101 | 0162  | 0223         | 0284 | 0345 | 0406 | 0467    | 02           |
| 13    | 852 0528      | 0589 | 0650 | 0711 | 0772  | 0833         | 0894 | 0955 | 1017 | 1078    | 6.2          |
| 14    | 1139          | 1200 | 1261 | 1322 | 1383  | 1444         | 1505 | 1566 | 1627 | 1688    | 12.4         |
| 15    | 1749          | 1810 | 1871 | 1932 | 1993  | 2054         | 2115 | 2176 | 2237 | 2298    | 18.6         |
| 16    | 2359          | 2420 | 2481 | 2542 | 2604  | 2665         | 2726 | 2787 | 2848 | 2909    | 24.8         |
| 17    | 2970          | 3031 | 3092 | 3153 | 3214  | 3275         | 3336 | 3397 | 3458 | 3519    | 31.0         |
| 18    | 3580          | 3641 | 3702 | 3763 | 3824  | 3885         | 3946 | 4007 | 4068 | 4129    | 37.2         |
| 19    | 4190          | 4251 | 4312 | 4373 | 4434  | 4495         | 4556 | 4617 | 4678 | 4739    | 43.4         |
| 7120  | 852 4800      | 4861 | 4922 | 4983 | 5044  | 5105         | 5166 | 5227 | 5288 | 5349    | 49.6         |
| 21    | 5410          | 5471 | 5532 | 5593 | 5654  | 5715         | 5776 | 5837 | 5898 | 5959    | 55.8         |
| 22    | 6020          | 6081 | 6142 | 6203 | 6264  | 6325         | 6386 | 6447 | 6508 | 6568    |              |
| 23    | 6629          | 6690 | 6751 | 6812 | 6873  | 6934         | 6995 | 7056 | 7117 | 7178    |              |
| 24    | 7239          | 7300 | 7361 | 7422 | 7483  | 7544         | 7605 | 7666 | 7727 | 7788    |              |
| 25    | 7849          | 7910 | 7971 | 8032 | 8093  | 8154         | 8214 | 8275 | 8336 | 8397    |              |
| 26    | 8458          | 8519 | 8580 | 8641 | 8702  | 8763         | 8824 | 8885 | 8946 | 9007    |              |
| 27    | 9068          | 9129 | 9189 | 9250 | 9311  | 9372         | 9433 | 9494 | 9555 | 9616    |              |
| 28    | 9677          | 9738 | 9799 | 9860 | 9921  | 9982         | 0042 | 0103 | 0164 | 0225    |              |
| 29    | 853 0286      | 0347 | 0408 | 0469 | 0530  | 0591         | 0652 | 0713 | 0773 | 0834    |              |
| 7130  | 853 0895      | 0956 | 1017 | 1078 | 1139  | 1200         | 1261 | 1322 | 1383 | 1443    |              |
| 31    | 1504          | 1565 | 1626 | 1687 | 1748  | 1809         | 1870 | 1931 | 1992 | 2052    |              |
| 32    | 2113          | 2174 | 2235 | 2296 | 2357  | 2418         | 2479 | 2540 | 2600 | 2661    | 61           |
| 33    | 2722          | 2783 | 2844 | 2905 | 2966  | 3027         | 3088 | 3148 | 3209 | 3270    | 6.1          |
| 34    | 3331          | 3392 | 3453 | 3514 | 3575  | 3635         | 3696 | 3757 | 3818 | 3879    | 12.2         |
| 35    | 3940          | 4001 | 4062 | 4122 | 4183  | 4244         | 4305 | 4366 | 4427 | 4488    | 18.3         |
| 36    | 4548          | 4609 | 4670 | 4731 | 4792  | 4853         | 4914 | 4974 | 5035 | 5096    | 24.4         |
| 37    | 5157          | 5218 | 5279 | 5340 | 5400  | 5461         | 5522 | 5583 | 5644 | 5705    | 30.5         |
| 38    | 5765          | 5826 | 5887 | 5948 | 6009  | 6070         | 6130 | 6191 | 6252 | 6313    | 36.6         |
| 39    | 6374          | 6435 | 6495 | 6556 | 6617  | 6678         | 6739 | 6800 | 6860 | 6921    | 42.7         |
| 7140  | 853 6982      | 7043 | 7104 | 7165 | 7225  | 7286         | 7347 | 7408 | 7469 | 7530    | 48.8         |
| 41    | 7590          | 7651 | 7712 | 7773 | 7834  | 7894         | 7955 | 8016 | 8077 | 8138    | 54.9         |
| 42    | 8198          | 8259 | 8320 | 8381 | 8442  | 8502         | 8563 | 8624 | 8685 | 8746    |              |
| 43    | 8807          | 8867 | 8928 | 8989 | 9050  | 9110         | 9171 | 9232 | 9293 | 9354    |              |
| 44    | 9414          | 9475 | 9536 | 9597 | 9658  | 9718         | 9779 | 9840 | 9901 | 9962    |              |
| 45    | 854 0022      | 0083 | 0144 | 0205 | 0265  | 0326         | 0387 | 0448 | 0509 | 0569    |              |
| 46    | 0630          | 0691 | 0752 | 0812 | 0873  | 0934         | 0995 | 1056 | 1116 | 1177    |              |
| 47    | 1238          | 1299 | 1359 | 1420 | 1481  | 1542         | 1602 | 1663 | 1724 | 1785    |              |
| 48    | 1845          | 1906 | 1967 | 2028 | 2088  | 2149         | 2210 | 2271 | 2331 | 2392    |              |
| 49    | 2453          | 2514 | 2574 | 2635 | 2696  | 2757         | 2817 | 2878 | 2939 | 3000    |              |
| 7150  | 854 3060      | 3121 | 3182 | 3243 | 3303  | 3364         | 3425 | 3486 | 3546 | 3607    |              |
| N.    | 0             | 1    | 2    | 3    | 4     | 5            | 6    | 7    | 8    | 9       | P. P.        |
| 71000 | = 19° 43' 20" |      |      |      | 71000 | = 1° 58' 20" |      |      |      | 8.4.685 | 4891 T. 7464 |
| 71100 | = 19 45 0     |      |      |      | 71100 | = 1 58 30    |      |      |      | 4889    | 7469         |
| 71200 | = 19 46 0     |      |      |      | 71200 | = 1 58 40    |      |      |      | 4886    | 7474         |
| 71300 | = 19 48 20    |      |      |      | 71300 | = 1 58 50    |      |      |      | 4884    | 7479         |
| 71400 | = 19 50 0     |      |      |      | 71400 | = 1 59 0     |      |      |      | 4881    | 7484         |



| N.   | 0                    | 1    | 2    | 3    | 4                  | 5        | 6    | 7    | 8    | 9       | P. P.  |
|------|----------------------|------|------|------|--------------------|----------|------|------|------|---------|--------|
| 7150 | 854 3060             | 3121 | 3182 | 3243 | 3303               | 3364     | 3425 | 3486 | 3546 | 3607    |        |
| 51   | 3668                 | 3729 | 3789 | 3850 | 3911               | 3971     | 4032 | 4093 | 4154 | 4214    |        |
| 52   | 4275                 | 4336 | 4397 | 4457 | 4518               | 4579     | 4639 | 4700 | 4761 | 4822    |        |
| 53   | 4882                 | 4943 | 5004 | 5064 | 5125               | 5186     | 5247 | 5307 | 5368 | 5429    |        |
| 54   | 5489                 | 5550 | 5611 | 5671 | 5732               | 5793     | 5854 | 5914 | 5975 | 6036    |        |
| 55   | 6096                 | 6157 | 6218 | 6278 | 6339               | 6400     | 6461 | 6521 | 6582 | 6643    |        |
| 56   | 6703                 | 6764 | 6825 | 6885 | 6946               | 7007     | 7067 | 7128 | 7189 | 7249    |        |
| 57   | 7310                 | 7371 | 7432 | 7492 | 7553               | 7614     | 7674 | 7735 | 7796 | 7856    |        |
| 58   | 7917                 | 7978 | 8038 | 8099 | 8160               | 8220     | 8281 | 8342 | 8402 | 8463    |        |
| 59   | 8524                 | 8584 | 8645 | 8706 | 8766               | 8827     | 8888 | 8948 | 9009 | 9070    |        |
| 7160 | 854 9130             | 9191 | 9252 | 9312 | 9373               | 9433     | 9494 | 9555 | 9615 | 9676    |        |
| 61   | 9737                 | 9797 | 9858 | 9919 | 9979               | 0040     | 0101 | 0161 | 0222 | 0283    | 61     |
| 62   | 855 0343             | 0404 | 0464 | 0525 | 0586               | 0646     | 0707 | 0768 | 0828 | 0889    | 2 6.1  |
| 63   | 0950                 | 1010 | 1071 | 1131 | 1192               | 1253     | 1313 | 1374 | 1435 | 1495    | 3 12.2 |
| 64   | 1556                 | 1616 | 1677 | 1738 | 1798               | 1859     | 1919 | 1980 | 2041 | 2101    | 4 18.3 |
| 65   | 2162                 | 2223 | 2283 | 2344 | 2404               | 2465     | 2526 | 2586 | 2647 | 2707    | 5 24.4 |
| 66   | 2768                 | 2829 | 2889 | 2950 | 3010               | 3071     | 3132 | 3192 | 3253 | 3313    | 6 30.5 |
| 67   | 3374                 | 3435 | 3495 | 3556 | 3616               | 3677     | 3738 | 3798 | 3859 | 3919    | 7 36.6 |
| 68   | 3980                 | 4041 | 4101 | 4162 | 4222               | 4283     | 4343 | 4404 | 4465 | 4525    | 8 42.7 |
| 69   | 4586                 | 4646 | 4707 | 4768 | 4828               | 4889     | 4949 | 5010 | 5070 | 5131    | 9 48.8 |
| 7170 | 855 5192             | 5252 | 5313 | 5373 | 5434               | 5494     | 5555 | 5616 | 5676 | 5737    | 9 54.9 |
| 71   | 5797                 | 5858 | 5918 | 5979 | 6039               | 6100     | 6161 | 6221 | 6282 | 6342    |        |
| 72   | 6403                 | 6463 | 6524 | 6584 | 6645               | 6706     | 6766 | 6827 | 6887 | 6948    |        |
| 73   | 7008                 | 7069 | 7129 | 7190 | 7250               | 7311     | 7372 | 7432 | 7493 | 7553    |        |
| 74   | 7614                 | 7674 | 7735 | 7795 | 7856               | 7916     | 7977 | 8037 | 8098 | 8159    |        |
| 75   | 8219                 | 8280 | 8340 | 8401 | 8461               | 8522     | 8582 | 8643 | 8703 | 8764    |        |
| 76   | 8824                 | 8885 | 8945 | 9006 | 9066               | 9127     | 9187 | 9248 | 9308 | 9369    |        |
| 77   | 9429                 | 9490 | 9550 | 9611 | 9672               | 9732     | 9793 | 9853 | 9914 | 9974    |        |
| 78   | 856 0035             | 0095 | 0156 | 0216 | 0277               | 0337     | 0398 | 0458 | 0519 | 0579    |        |
| 79   | 0640                 | 0700 | 0761 | 0821 | 0882               | 0942     | 1002 | 1063 | 1123 | 1184    |        |
| 7180 | 856 1244             | 1305 | 1365 | 1426 | 1486               | 1547     | 1607 | 1668 | 1728 | 1789    |        |
| 81   | 1849                 | 1910 | 1970 | 2031 | 2091               | 2152     | 2212 | 2273 | 2333 | 2394    |        |
| 82   | 2454                 | 2514 | 2575 | 2635 | 2696               | 2756     | 2817 | 2877 | 2938 | 2998    |        |
| 83   | 3059                 | 3119 | 3180 | 3240 | 3301               | 3361     | 3421 | 3482 | 3542 | 3603    |        |
| 84   | 3663                 | 3724 | 3784 | 3845 | 3905               | 3965     | 4026 | 4086 | 4147 | 4207    | 1 60   |
| 85   | 4268                 | 4328 | 4389 | 4449 | 4509               | 4570     | 4630 | 4691 | 4751 | 4812    | 2 6.0  |
| 86   | 4872                 | 4933 | 4993 | 5053 | 5114               | 5174     | 5235 | 5295 | 5356 | 5416    | 3 12.0 |
| 87   | 5476                 | 5537 | 5597 | 5658 | 5718               | 5779     | 5839 | 5899 | 5960 | 6020    | 4 18.0 |
| 88   | 6081                 | 6141 | 6202 | 6262 | 6322               | 6383     | 6443 | 6504 | 6564 | 6624    | 5 24.0 |
| 89   | 6685                 | 6745 | 6806 | 6866 | 6926               | 6987     | 7047 | 7108 | 7168 | 7229    | 6 30.0 |
| 7190 | 856 7289             | 7349 | 7410 | 7470 | 7531               | 7591     | 7651 | 7712 | 7772 | 7832    | 7 36.0 |
| 91   | 7893                 | 7953 | 8014 | 8074 | 8134               | 8195     | 8255 | 8316 | 8376 | 8436    | 8 42.0 |
| 92   | 8497                 | 8557 | 8618 | 8678 | 8738               | 8799     | 8859 | 8919 | 8980 | 9040    | 9 48.0 |
| 93   | 9101                 | 9161 | 9221 | 9282 | 9342               | 9402     | 9463 | 9523 | 9584 | 9644    |        |
| 94   | 9704                 | 9765 | 9825 | 9885 | 9946               | 0006     | 0067 | 0127 | 0187 | 0248    |        |
| 95   | 857 0308             | 0368 | 0429 | 0489 | 0549               | 0610     | 0670 | 0730 | 0791 | 0851    |        |
| 96   | 0912                 | 0972 | 1032 | 1093 | 1153               | 1213     | 1274 | 1334 | 1394 | 1455    |        |
| 97   | 1515                 | 1575 | 1636 | 1696 | 1756               | 1817     | 1877 | 1937 | 1998 | 2058    |        |
| 98   | 2118                 | 2179 | 2239 | 2299 | 2360               | 2420     | 2480 | 2541 | 2601 | 2661    |        |
| 99   | 2722                 | 2782 | 2842 | 2903 | 2963               | 3023     | 3084 | 3144 | 3204 | 3265    |        |
| 7200 | 857 3325             | 3385 | 3446 | 3506 | 3566               | 3627     | 3687 | 3747 | 3807 | 3868    |        |
| N.   | 0                    | 1    | 2    | 3    | 4                  | 5        | 6    | 7    | 8    | 9       | P. P.  |
|      | 71500" = 19° 51' 40" |      |      |      | 7150" = 1° 59' 10" | S. 4.685 | 4879 |      |      | T. 7489 |        |
|      | 71600" = 19 53 20    |      |      |      | 7160" = 1 59 20    |          | 4876 |      |      | 7494    |        |
|      | 71700" = 19 55 0     |      |      |      | 7170" = 1 59 30    |          | 4874 |      |      | 7498    |        |
|      | 71800" = 19 56 40    |      |      |      | 7180" = 1 59 40    |          | 4872 |      |      | 7502    |        |
|      | 71900" = 19 58 20    |      |      |      | 7190" = 1 59 50    |          | 4869 |      |      | 7508    |        |







| N.   | 0                  | 1     | 2     | 3     | 4                 | 5     | 6     | 7        | 8     | 9       | P. P.  |
|------|--------------------|-------|-------|-------|-------------------|-------|-------|----------|-------|---------|--------|
| 7250 | 860 3380           | 3440  | 3500  | 3560  | 3620              | 3680  | 3739  | 3799     | 3859  | 3919    |        |
| 51   | 3979               | 4039  | 4099  | 4159  | 4219              | 4279  | 4338  | 4398     | 4458  | 4518    |        |
| 52   | 4578               | 4638  | 4698  | 4758  | 4817              | 4877  | 4937  | 4997     | 5057  | 5117    |        |
| 53   | 5177               | 5237  | 5297  | 5356  | 5416              | 5476  | 5536  | 5596     | 5656  | 5716    |        |
| 54   | 5776               | 5835  | 5895  | 5955  | 6015              | 6075  | 6135  | 6195     | 6254  | 6314    |        |
| 55   | 6374               | 6434  | 6494  | 6554  | 6614              | 6673  | 6733  | 6793     | 6853  | 6913    |        |
| 56   | 6973               | 7033  | 7092  | 7152  | 7212              | 7272  | 7332  | 7392     | 7452  | 7511    |        |
| 57   | 7571               | 7631  | 7691  | 7751  | 7811              | 7870  | 7930  | 7990     | 8050  | 8110    |        |
| 58   | 8170               | 8229  | 8289  | 8349  | 8409              | 8469  | 8529  | 8588     | 8648  | 8708    |        |
| 59   | 8768               | 8828  | 8888  | 8947  | 9007              | 9067  | 9127  | 9187     | 9247  | 9306    |        |
| 7260 | 860 9366           | 9426  | 9486  | 9546  | 9605              | 9665  | 9725  | 9785     | 9845  | 9905    |        |
| 61   | 9964               | 10024 | 10084 | 10144 | 10204             | 10263 | 10323 | 10383    | 10443 | 10503   | 60     |
| 62   | 861 0562           | 0622  | 0682  | 0742  | 0802              | 0861  | 0921  | 0981     | 1041  | 1101    | 1 6.0  |
| 63   | 1160               | 1220  | 1280  | 1340  | 1400              | 1459  | 1519  | 1579     | 1639  | 1699    | 2 12.0 |
| 64   | 1758               | 1818  | 1878  | 1938  | 1997              | 2057  | 2117  | 2177     | 2237  | 2296    | 3 18.0 |
| 65   | 2356               | 2416  | 2476  | 2536  | 2595              | 2655  | 2715  | 2775     | 2834  | 2894    | 4 24.0 |
| 66   | 2954               | 3014  | 3073  | 3133  | 3193              | 3253  | 3313  | 3372     | 3432  | 3492    | 5 30.0 |
| 67   | 3552               | 3611  | 3671  | 3731  | 3791              | 3850  | 3910  | 3970     | 4030  | 4089    | 6 36.0 |
| 68   | 4149               | 4209  | 4269  | 4328  | 4388              | 4448  | 4508  | 4567     | 4627  | 4687    | 7 42.0 |
| 69   | 4747               | 4806  | 4866  | 4926  | 4986              | 5045  | 5105  | 5165     | 5225  | 5284    | 8 48.0 |
| 7270 | 861 5344           | 5404  | 5464  | 5523  | 5583              | 5643  | 5703  | 5762     | 5822  | 5882    | 9 54.0 |
| 71   | 5941               | 6001  | 6061  | 6121  | 6180              | 6240  | 6300  | 6360     | 6419  | 6479    |        |
| 72   | 6539               | 6598  | 6658  | 6718  | 6778              | 6837  | 6897  | 6957     | 7016  | 7076    |        |
| 73   | 7136               | 7196  | 7255  | 7315  | 7375              | 7434  | 7494  | 7554     | 7614  | 7673    |        |
| 74   | 7733               | 7793  | 7852  | 7912  | 7972              | 8031  | 8091  | 8151     | 8211  | 8270    |        |
| 75   | 8330               | 8390  | 8449  | 8509  | 8568              | 8628  | 8688  | 8748     | 8808  | 8867    |        |
| 76   | 8927               | 8987  | 9046  | 9106  | 9166              | 9225  | 9285  | 9345     | 9404  | 9464    |        |
| 77   | 9524               | 9583  | 9643  | 9703  | 9762              | 9822  | 9882  | 9941     | 10001 | 10061   |        |
| 78   | 862 0121           | 0180  | 0240  | 0300  | 0359              | 0419  | 0479  | 0538     | 0598  | 0658    |        |
| 79   | 0717               | 0777  | 0837  | 0896  | 0956              | 1016  | 1075  | 1135     | 1194  | 1254    |        |
| 7280 | 862 1314           | 1373  | 1433  | 1493  | 1552              | 1612  | 1672  | 1731     | 1791  | 1851    |        |
| 81   | 1910               | 1970  | 2030  | 2089  | 2149              | 2209  | 2268  | 2328     | 2387  | 2447    | 50     |
| 82   | 2507               | 2566  | 2626  | 2686  | 2745              | 2805  | 2865  | 2924     | 2984  | 3043    | 1 5.0  |
| 83   | 3103               | 3163  | 3222  | 3282  | 3342              | 3401  | 3461  | 3520     | 3580  | 3640    | 2 11.8 |
| 84   | 3699               | 3759  | 3819  | 3878  | 3938              | 3997  | 4057  | 4117     | 4176  | 4236    | 3 17.7 |
| 85   | 4296               | 4355  | 4415  | 4474  | 4534              | 4594  | 4653  | 4713     | 4772  | 4832    | 4 23.6 |
| 86   | 4892               | 4951  | 5011  | 5070  | 5130              | 5190  | 5249  | 5309     | 5368  | 5428    | 5 29.5 |
| 87   | 5488               | 5547  | 5607  | 5666  | 5726              | 5786  | 5845  | 5905     | 5964  | 6024    | 6 35.4 |
| 88   | 6084               | 6143  | 6203  | 6262  | 6322              | 6382  | 6441  | 6501     | 6560  | 6620    | 7 41.3 |
| 89   | 6680               | 6739  | 6799  | 6858  | 6918              | 6977  | 7037  | 7097     | 7156  | 7216    | 8 47.2 |
| 7290 | 862 7275           | 7335  | 7394  | 7454  | 7514              | 7573  | 7633  | 7692     | 7752  | 7811    | 9 53.1 |
| 91   | 7871               | 7931  | 7990  | 8050  | 8109              | 8169  | 8228  | 8288     | 8347  | 8407    |        |
| 92   | 8467               | 8526  | 8586  | 8645  | 8705              | 8764  | 8824  | 8883     | 8943  | 9003    |        |
| 93   | 9062               | 9122  | 9181  | 9241  | 9300              | 9360  | 9419  | 9479     | 9539  | 9598    |        |
| 94   | 9658               | 9717  | 9777  | 9836  | 9896              | 9955  | 10015 | 10074    | 10134 | 10193   |        |
| 95   | 863 0253           | 0312  | 0372  | 0432  | 0491              | 0551  | 0610  | 0670     | 0729  | 0789    |        |
| 96   | 0848               | 0908  | 0967  | 1027  | 1086              | 1146  | 1205  | 1265     | 1324  | 1384    |        |
| 97   | 1443               | 1503  | 1562  | 1622  | 1682              | 1741  | 1801  | 1860     | 1920  | 1979    |        |
| 98   | 2039               | 2098  | 2158  | 2217  | 2277              | 2336  | 2396  | 2455     | 2515  | 2574    |        |
| 99   | 2634               | 2693  | 2753  | 2812  | 2872              | 2931  | 2991  | 3050     | 3110  | 3169    |        |
| 7300 | 863 3229           | 3288  | 3348  | 3407  | 3467              | 3526  | 3586  | 3645     | 3705  | 3764    |        |
| N.   | 0                  | 1     | 2     | 3     | 4                 | 5     | 6     | 7        | 8     | 9       | P. P.  |
|      | 7250° = 20° 8' 20" |       |       |       | 7250° = 2° 0' 50" |       |       | S. 4.685 | 4854  | T. 7538 |        |
|      | 72600 = 20 10 0    |       |       |       | 7260 = 2 1 0      |       |       |          | 4852  | 7543    |        |
|      | 72700 = 20 11 40   |       |       |       | 7270 = 2 1 10     |       |       |          | 4849  | 7548    |        |
|      | 72800 = 20 13 20   |       |       |       | 7280 = 2 1 20     |       |       |          | 4847  | 7553    |        |
|      | 72900 = 20 15 0    |       |       |       | 7290 = 2 1 30     |       |       |          | 4844  | 7557    |        |



| N.   | 0             | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | P. P.  |             |          |      |         |
|------|---------------|------|------|------|------|------|------|------|------|------|--------|-------------|----------|------|---------|
| 7300 | 863 3229      | 3288 | 3348 | 3407 | 3467 | 3526 | 3586 | 3645 | 3705 | 3764 |        |             |          |      |         |
| 01   | 3823          | 3883 | 3942 | 4002 | 4061 | 4121 | 4180 | 4240 | 4299 | 4359 |        |             |          |      |         |
| 02   | 4418          | 4478 | 4537 | 4597 | 4656 | 4716 | 4775 | 4835 | 4894 | 4954 |        |             |          |      |         |
| 03   | 5013          | 5072 | 5132 | 5191 | 5251 | 5310 | 5370 | 5429 | 5489 | 5548 |        |             |          |      |         |
| 04   | 5608          | 5667 | 5727 | 5786 | 5845 | 5905 | 5964 | 6024 | 6083 | 6143 |        |             |          |      |         |
| 05   | 6202          | 6262 | 6321 | 6381 | 6440 | 6499 | 6559 | 6618 | 6678 | 6737 |        |             |          |      |         |
| 06   | 6797          | 6856 | 6916 | 6975 | 7034 | 7094 | 7153 | 7213 | 7272 | 7332 |        |             |          |      |         |
| 07   | 7391          | 7451 | 7510 | 7569 | 7629 | 7688 | 7748 | 7807 | 7867 | 7926 |        |             |          |      |         |
| 08   | 7985          | 8045 | 8104 | 8164 | 8223 | 8283 | 8342 | 8401 | 8461 | 8520 |        |             |          |      |         |
| 09   | 8580          | 8639 | 8698 | 8758 | 8817 | 8877 | 8936 | 8996 | 9055 | 9114 |        |             |          |      |         |
| 7310 | 863 9174      | 9233 | 9293 | 9352 | 9411 | 9471 | 9530 | 9590 | 9649 | 9708 |        |             |          |      |         |
| 11   | 9768          | 9827 | 9887 | 9946 | 0005 | 0065 | 0124 | 0184 | 0243 | 0302 | 60     |             |          |      |         |
| 12   | 864 0362      | 0421 | 0481 | 0540 | 0599 | 0659 | 0718 | 0778 | 0837 | 0896 | 1 6.0  |             |          |      |         |
| 13   | 0956          | 1015 | 1075 | 1134 | 1193 | 1253 | 1312 | 1371 | 1431 | 1490 | 2 12.0 |             |          |      |         |
| 14   | 1550          | 1609 | 1668 | 1728 | 1787 | 1846 | 1906 | 1965 | 2025 | 2084 | 3 18.0 |             |          |      |         |
| 15   | 2143          | 2203 | 2262 | 2321 | 2381 | 2440 | 2500 | 2559 | 2618 | 2678 | 4 24.0 |             |          |      |         |
| 16   | 2737          | 2796 | 2856 | 2915 | 2974 | 3034 | 3093 | 3153 | 3212 | 3271 | 5 30.0 |             |          |      |         |
| 17   | 3331          | 3390 | 3449 | 3509 | 3568 | 3627 | 3687 | 3746 | 3805 | 3865 | 6 36.0 |             |          |      |         |
| 18   | 3924          | 3983 | 4043 | 4102 | 4161 | 4221 | 4280 | 4339 | 4399 | 4458 | 7 42.0 |             |          |      |         |
| 19   | 4517          | 4577 | 4636 | 4695 | 4755 | 4814 | 4873 | 4933 | 4992 | 5051 | 8 48.0 |             |          |      |         |
| 7320 | 864 5111      | 5170 | 5229 | 5289 | 5348 | 5407 | 5467 | 5526 | 5585 | 5645 | 9 54.0 |             |          |      |         |
| 21   | 5704          | 5763 | 5823 | 5882 | 5941 | 6001 | 6060 | 6119 | 6179 | 6238 |        |             |          |      |         |
| 22   | 6297          | 6357 | 6416 | 6475 | 6534 | 6594 | 6653 | 6712 | 6772 | 6831 |        |             |          |      |         |
| 23   | 6890          | 6950 | 7009 | 7068 | 7128 | 7187 | 7246 | 7305 | 7365 | 7424 |        |             |          |      |         |
| 24   | 7483          | 7543 | 7602 | 7661 | 7721 | 7780 | 7839 | 7898 | 7958 | 8017 |        |             |          |      |         |
| 25   | 8076          | 8136 | 8195 | 8254 | 8313 | 8373 | 8432 | 8491 | 8551 | 8610 |        |             |          |      |         |
| 26   | 8669          | 8728 | 8788 | 8847 | 8906 | 8966 | 9025 | 9084 | 9143 | 9203 |        |             |          |      |         |
| 27   | 9262          | 9321 | 9380 | 9440 | 9499 | 9558 | 9618 | 9677 | 9736 | 9795 |        |             |          |      |         |
| 28   | 9855          | 9914 | 9973 | 0032 | 0092 | 0151 | 0210 | 0269 | 0329 | 0388 |        |             |          |      |         |
| 29   | 865 0447      | 0506 | 0566 | 0625 | 0684 | 0743 | 0803 | 0862 | 0921 | 0980 |        |             |          |      |         |
| 7330 | 865 1040      | 1099 | 1158 | 1217 | 1277 | 1336 | 1395 | 1454 | 1514 | 1573 |        |             |          |      |         |
| 31   | 1632          | 1691 | 1751 | 1810 | 1869 | 1928 | 1988 | 2047 | 2106 | 2165 | 59     |             |          |      |         |
| 32   | 2225          | 2284 | 2343 | 2402 | 2461 | 2521 | 2580 | 2639 | 2698 | 2758 | 1 5.9  |             |          |      |         |
| 33   | 2817          | 2876 | 2935 | 2995 | 3054 | 3113 | 3172 | 3231 | 3291 | 3350 | 2 11.8 |             |          |      |         |
| 34   | 3409          | 3468 | 3527 | 3587 | 3646 | 3705 | 3764 | 3824 | 3883 | 3942 | 3 17.7 |             |          |      |         |
| 35   | 4001          | 4060 | 4120 | 4179 | 4238 | 4297 | 4356 | 4416 | 4475 | 4534 | 4 23.6 |             |          |      |         |
| 36   | 4593          | 4652 | 4712 | 4771 | 4830 | 4889 | 4948 | 5008 | 5067 | 5126 | 5 29.5 |             |          |      |         |
| 37   | 5185          | 5244 | 5304 | 5363 | 5422 | 5481 | 5540 | 5600 | 5659 | 5718 | 6 35.4 |             |          |      |         |
| 38   | 5777          | 5836 | 5895 | 5955 | 6014 | 6073 | 6132 | 6191 | 6251 | 6310 | 7 41.3 |             |          |      |         |
| 39   | 6369          | 6428 | 6487 | 6546 | 6606 | 6665 | 6724 | 6783 | 6842 | 6901 | 8 47.2 |             |          |      |         |
| 7340 | 865 6961      | 7020 | 7079 | 7138 | 7197 | 7256 | 7316 | 7375 | 7434 | 7493 | 9 53.1 |             |          |      |         |
| 41   | 7552          | 7611 | 7671 | 7730 | 7789 | 7848 | 7907 | 7966 | 8025 | 8085 |        |             |          |      |         |
| 42   | 8144          | 8203 | 8262 | 8321 | 8380 | 8440 | 8499 | 8558 | 8617 | 8676 |        |             |          |      |         |
| 43   | 8735          | 8794 | 8854 | 8913 | 8972 | 9031 | 9090 | 9149 | 9208 | 9268 |        |             |          |      |         |
| 44   | 9327          | 9386 | 9445 | 9504 | 9563 | 9622 | 9681 | 9741 | 9800 | 9859 |        |             |          |      |         |
| 45   | 9918          | 9977 | 0036 | 0095 | 0155 | 0214 | 0273 | 0332 | 0391 | 0450 |        |             |          |      |         |
| 46   | 866 0509      | 0568 | 0627 | 0687 | 0746 | 0805 | 0864 | 0923 | 0982 | 1041 |        |             |          |      |         |
| 47   | 1100          | 1160 | 1219 | 1278 | 1337 | 1396 | 1455 | 1514 | 1573 | 1632 |        |             |          |      |         |
| 48   | 1601          | 1751 | 1810 | 1869 | 1928 | 1987 | 2046 | 2105 | 2164 | 2223 |        |             |          |      |         |
| 49   | 2282          | 2342 | 2401 | 2460 | 2519 | 2578 | 2637 | 2696 | 2755 | 2814 |        |             |          |      |         |
| 7350 | 866 2873      | 2932 | 2992 | 3051 | 3110 | 3169 | 3228 | 3287 | 3346 | 3405 |        |             |          |      |         |
| N.   | 0             | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | P. P.  |             |          |      |         |
| 7300 | = 20° 16' 40" |      |      |      |      |      |      |      |      |      | 7300   | = 2° 1' 40" | S. 4.685 | 4842 | T. 7562 |
| 7310 | = 20 18 20    |      |      |      |      |      |      |      |      |      | 7310   | = 2 1 50    |          | 4840 | 7567    |
| 7320 | = 20 20 0     |      |      |      |      |      |      |      |      |      | 7320   | = 2 2 0     |          | 4837 | 7572    |
| 7330 | = 20 21 40    |      |      |      |      |      |      |      |      |      | 7330   | = 2 2 10    |          | 4835 | 7577    |
| 7340 | = 20 23 20    |      |      |      |      |      |      |      |      |      | 7340   | = 2 2 20    |          | 4832 | 7582    |



| N.   | 0        | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8     | 9     | P. P.  |
|------|----------|------|------|------|------|------|------|------|-------|-------|--------|
| 7350 | 866 2873 | 2932 | 2992 | 3051 | 3110 | 3169 | 3228 | 3287 | 3346  | 3405  |        |
| 51   | 3464     | 3523 | 3582 | 3641 | 3700 | 3760 | 3819 | 3878 | 3937  | 3996  |        |
| 52   | 4055     | 4114 | 4173 | 4232 | 4291 | 4350 | 4409 | 4468 | 4528  | 4587  |        |
| 53   | 4646     | 4705 | 4764 | 4823 | 4882 | 4941 | 5000 | 5059 | 5118  | 5177  |        |
| 54   | 5236     | 5295 | 5354 | 5413 | 5472 | 5532 | 5591 | 5650 | 5709  | 5768  |        |
| 55   | 5822     | 5886 | 5945 | 6004 | 6063 | 6122 | 6181 | 6240 | 6299  | 6358  |        |
| 56   | 6417     | 6476 | 6535 | 6594 | 6653 | 6712 | 6771 | 6830 | 6889  | 6949  |        |
| 57   | 7038     | 7097 | 7156 | 7215 | 7274 | 7333 | 7392 | 7451 | 7510  | 7569  |        |
| 58   | 7659     | 7718 | 7777 | 7836 | 7895 | 7954 | 8013 | 8072 | 8131  | 8190  |        |
| 59   | 8291     | 8350 | 8409 | 8468 | 8527 | 8586 | 8645 | 8704 | 8763  | 8822  |        |
| 7360 | 866 8728 | 8817 | 8896 | 8955 | 9014 | 9073 | 9132 | 9191 | 9250  | 9309  |        |
| 61   | 9468     | 9527 | 9586 | 9645 | 9704 | 9763 | 9822 | 9881 | 9940  | 9999  | 50     |
| 62   | 9958     | 6017 | 6076 | 6135 | 6194 | 6253 | 6312 | 6371 | 6430  | 6489  | 1 5.9  |
| 63   | 867 0548 | 0607 | 0666 | 0725 | 0784 | 0843 | 0902 | 0961 | 1020  | 1079  | 2 11.8 |
| 64   | 1138     | 1197 | 1256 | 1315 | 1374 | 1433 | 1492 | 1551 | 1610  | 1669  | 3 17.7 |
| 65   | 1728     | 1787 | 1846 | 1905 | 1964 | 2023 | 2082 | 2141 | 2200  | 2259  | 4 23.6 |
| 66   | 2317     | 2376 | 2435 | 2494 | 2553 | 2612 | 2671 | 2730 | 2789  | 2848  | 5 29.5 |
| 67   | 2937     | 2996 | 3055 | 3114 | 3173 | 3232 | 3291 | 3350 | 3409  | 3468  | 6 35.4 |
| 68   | 3568     | 3627 | 3686 | 3745 | 3804 | 3863 | 3922 | 3981 | 4040  | 4099  | 7 41.3 |
| 69   | 4198     | 4257 | 4316 | 4375 | 4434 | 4493 | 4552 | 4611 | 4670  | 4729  | 8 47.2 |
| 7370 | 867 4675 | 4734 | 4793 | 4852 | 4911 | 4970 | 5029 | 5088 | 5147  | 5206  | 9 53.1 |
| 71   | 5364     | 5423 | 5482 | 5541 | 5600 | 5659 | 5718 | 5777 | 5836  | 5895  |        |
| 72   | 5954     | 6013 | 6072 | 6131 | 6190 | 6249 | 6308 | 6367 | 6426  | 6485  |        |
| 73   | 6544     | 6603 | 6662 | 6721 | 6780 | 6839 | 6898 | 6957 | 7016  | 7075  |        |
| 74   | 7164     | 7223 | 7282 | 7341 | 7400 | 7459 | 7518 | 7577 | 7636  | 7695  |        |
| 75   | 7755     | 7814 | 7873 | 7932 | 7991 | 8050 | 8109 | 8168 | 8227  | 8286  |        |
| 76   | 8366     | 8425 | 8484 | 8543 | 8602 | 8661 | 8720 | 8779 | 8838  | 8897  |        |
| 77   | 8957     | 9016 | 9075 | 9134 | 9193 | 9252 | 9311 | 9370 | 9429  | 9488  |        |
| 78   | 9548     | 9607 | 9666 | 9725 | 9784 | 9843 | 9902 | 9961 | 10000 | 10000 |        |
| 79   | 9955     | 6014 | 6073 | 6132 | 6191 | 6250 | 6309 | 6368 | 6427  | 6486  |        |
| 7380 | 868 0634 | 0693 | 0752 | 0811 | 0870 | 0929 | 0988 | 1047 | 1106  | 1165  |        |
| 81   | 1254     | 1313 | 1372 | 1431 | 1490 | 1549 | 1608 | 1667 | 1726  | 1785  | 18     |
| 82   | 1844     | 1903 | 1962 | 2021 | 2080 | 2139 | 2198 | 2257 | 2316  | 2375  | 1 5.8  |
| 83   | 2459     | 2518 | 2577 | 2636 | 2695 | 2754 | 2813 | 2872 | 2931  | 2990  | 2 11.6 |
| 84   | 2977     | 3036 | 3095 | 3154 | 3213 | 3272 | 3331 | 3390 | 3449  | 3508  | 3 17.4 |
| 85   | 3567     | 3626 | 3685 | 3744 | 3803 | 3862 | 3921 | 3980 | 4039  | 4098  | 4 23.2 |
| 86   | 4157     | 4216 | 4275 | 4334 | 4393 | 4452 | 4511 | 4570 | 4629  | 4688  | 5 29.0 |
| 87   | 4748     | 4807 | 4866 | 4925 | 4984 | 5043 | 5102 | 5161 | 5220  | 5279  | 6 34.8 |
| 88   | 5339     | 5398 | 5457 | 5516 | 5575 | 5634 | 5693 | 5752 | 5811  | 5870  | 7 40.6 |
| 89   | 5930     | 5989 | 6048 | 6107 | 6166 | 6225 | 6284 | 6343 | 6402  | 6461  | 8 46.4 |
| 7390 | 868 6444 | 6503 | 6562 | 6621 | 6680 | 6739 | 6798 | 6857 | 6916  | 6975  | 9 52.2 |
| 91   | 7034     | 7093 | 7152 | 7211 | 7270 | 7329 | 7388 | 7447 | 7506  | 7565  |        |
| 92   | 7625     | 7684 | 7743 | 7802 | 7861 | 7920 | 7979 | 8038 | 8097  | 8156  |        |
| 93   | 8237     | 8296 | 8355 | 8414 | 8473 | 8532 | 8591 | 8650 | 8709  | 8768  |        |
| 94   | 8879     | 8938 | 8997 | 9056 | 9115 | 9174 | 9233 | 9292 | 9351  | 9410  |        |
| 95   | 9471     | 9530 | 9589 | 9648 | 9707 | 9766 | 9825 | 9884 | 9943  | 10000 |        |
| 96   | 9959     | 6018 | 6077 | 6136 | 6195 | 6254 | 6313 | 6372 | 6431  | 6490  |        |
| 97   | 869 1346 | 1405 | 1464 | 1523 | 1582 | 1641 | 1700 | 1759 | 1818  | 1877  |        |
| 98   | 1936     | 1995 | 2054 | 2113 | 2172 | 2231 | 2290 | 2349 | 2408  | 2467  |        |
| 99   | 2526     | 2585 | 2644 | 2703 | 2762 | 2821 | 2880 | 2939 | 2998  | 3057  |        |
| 7400 | 869 3317 | 3376 | 3435 | 3494 | 3553 | 3612 | 3671 | 3730 | 3789  | 3848  |        |

  

| N.   | 0       | 1       | 2       | 3       | 4       | 5       | 6       | 7       | 8       | 9       | P. P.   |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 7350 | 20 25 0 | 21 30 0 | 22 35 0 | 23 40 0 | 24 45 0 | 25 50 0 | 26 55 0 | 27 00 0 | 28 05 0 | 29 10 0 | T. 7587 |
| 7360 | 20 25 0 | 21 30 0 | 22 35 0 | 23 40 0 | 24 45 0 | 25 50 0 | 26 55 0 | 27 00 0 | 28 05 0 | 29 10 0 | 7598    |
| 7370 | 20 25 0 | 21 30 0 | 22 35 0 | 23 40 0 | 24 45 0 | 25 50 0 | 26 55 0 | 27 00 0 | 28 05 0 | 29 10 0 | 7597    |
| 7380 | 20 25 0 | 21 30 0 | 22 35 0 | 23 40 0 | 24 45 0 | 25 50 0 | 26 55 0 | 27 00 0 | 28 05 0 | 29 10 0 | 7603    |
| 7390 | 20 25 0 | 21 30 0 | 22 35 0 | 23 40 0 | 24 45 0 | 25 50 0 | 26 55 0 | 27 00 0 | 28 05 0 | 29 10 0 | 7607    |



| N.    | 0        | 1           | 2     | 3     | 4     | 5     | 6           | 7     | 8     | 9     | P. P. |
|-------|----------|-------------|-------|-------|-------|-------|-------------|-------|-------|-------|-------|
| 7400  | 869 4317 | 2376        | 2435  | 2493  | 2552  | 2611  | 2670        | 2728  | 2787  | 2845  |       |
| 01    | 2904     | 2963        | 3021  | 3080  | 3139  | 3197  | 3256        | 3314  | 3373  | 3431  |       |
| 02    | 3491     | 3549        | 3608  | 3667  | 3725  | 3784  | 3842        | 3901  | 3959  | 4018  |       |
| 03    | 4077     | 4136        | 4195  | 4253  | 4312  | 4371  | 4429        | 4488  | 4546  | 4605  |       |
| 04    | 4664     | 4723        | 4781  | 4840  | 4899  | 4957  | 5016        | 5074  | 5133  | 5191  |       |
| 05    | 5251     | 5309        | 5368  | 5427  | 5485  | 5544  | 5602        | 5661  | 5719  | 5778  |       |
| 06    | 5837     | 5896        | 5954  | 6013  | 6072  | 6130  | 6189        | 6247  | 6306  | 6364  |       |
| 07    | 6423     | 6482        | 6541  | 6599  | 6658  | 6717  | 6775        | 6834  | 6892  | 6951  |       |
| 08    | 7010     | 7068        | 7127  | 7186  | 7244  | 7303  | 7361        | 7420  | 7478  | 7537  |       |
| 09    | 7596     | 7655        | 7713  | 7772  | 7830  | 7889  | 7947        | 8006  | 8064  | 8123  |       |
| 7410  | 869 8182 | 8241        | 8299  | 8358  | 8417  | 8475  | 8534        | 8592  | 8651  | 8709  |       |
| 11    | 8768     | 8827        | 8885  | 8944  | 8993  | 9051  | 9110        | 9168  | 9227  | 9285  |       |
| 12    | 9344     | 9403        | 9461  | 9520  | 9578  | 9637  | 9695        | 9754  | 9812  | 9871  |       |
| 13    | 9930     | 9989        | 10047 | 10106 | 10164 | 10223 | 10281       | 10340 | 10398 | 10457 |       |
| 14    | 870 0526 | 0584        | 0643  | 0701  | 0760  | 0818  | 0877        | 0935  | 0994  | 1052  |       |
| 15    | 1111     | 1170        | 1229  | 1287  | 1346  | 1404  | 1463        | 1521  | 1580  | 1638  |       |
| 16    | 1697     | 1756        | 1814  | 1873  | 1931  | 1990  | 2048        | 2107  | 2165  | 2224  |       |
| 17    | 2283     | 2341        | 2400  | 2458  | 2517  | 2575  | 2634        | 2692  | 2751  | 2809  |       |
| 18    | 2868     | 2927        | 2985  | 3044  | 3102  | 3161  | 3219        | 3278  | 3336  | 3395  |       |
| 19    | 3454     | 3512        | 3571  | 3629  | 3688  | 3746  | 3805        | 3863  | 3922  | 3980  |       |
| 7420  | 870 4039 | 4098        | 4156  | 4215  | 4273  | 4332  | 4390        | 4449  | 4507  | 4566  |       |
| 21    | 4624     | 4683        | 4741  | 4800  | 4858  | 4917  | 4975        | 5034  | 5092  | 5151  |       |
| 22    | 5210     | 5268        | 5327  | 5385  | 5444  | 5502  | 5561        | 5619  | 5678  | 5736  |       |
| 23    | 5795     | 5853        | 5912  | 5970  | 6029  | 6087  | 6146        | 6204  | 6263  | 6321  |       |
| 24    | 6380     | 6438        | 6497  | 6555  | 6614  | 6672  | 6731        | 6789  | 6848  | 6906  |       |
| 25    | 6965     | 7023        | 7082  | 7140  | 7199  | 7257  | 7316        | 7374  | 7433  | 7491  |       |
| 26    | 7549     | 7608        | 7666  | 7725  | 7783  | 7842  | 7900        | 7959  | 8017  | 8076  |       |
| 27    | 8134     | 8193        | 8251  | 8310  | 8368  | 8427  | 8485        | 8544  | 8602  | 8661  |       |
| 28    | 8719     | 8777        | 8836  | 8894  | 8953  | 9011  | 9070        | 9128  | 9187  | 9245  |       |
| 29    | 9304     | 9362        | 9421  | 9479  | 9537  | 9596  | 9654        | 9713  | 9771  | 9830  |       |
| 7430  | 870 0888 | 0947        | 1005  | 1064  | 1122  | 1181  | 1239        | 1298  | 1356  | 1415  |       |
| 31    | 871 0473 | 0531        | 0589  | 0648  | 0706  | 0765  | 0823        | 0882  | 0940  | 0999  |       |
| 32    | 1057     | 1115        | 1174  | 1232  | 1291  | 1349  | 1408        | 1466  | 1525  | 1583  |       |
| 33    | 1641     | 1700        | 1758  | 1817  | 1875  | 1934  | 1992        | 2051  | 2109  | 2168  |       |
| 34    | 2226     | 2284        | 2343  | 2401  | 2460  | 2518  | 2577        | 2635  | 2694  | 2752  |       |
| 35    | 2810     | 2868        | 2927  | 2985  | 3044  | 3102  | 3161        | 3219  | 3278  | 3336  |       |
| 36    | 3394     | 3453        | 3511  | 3569  | 3628  | 3686  | 3745        | 3803  | 3862  | 3920  |       |
| 37    | 3978     | 4036        | 4095  | 4153  | 4212  | 4270  | 4329        | 4387  | 4446  | 4504  |       |
| 38    | 4562     | 4620        | 4679  | 4737  | 4796  | 4854  | 4913        | 4971  | 5030  | 5088  |       |
| 39    | 5146     | 5204        | 5263  | 5321  | 5380  | 5438  | 5497        | 5555  | 5614  | 5672  |       |
| 7440  | 871 5729 | 5788        | 5846  | 5904  | 5963  | 6021  | 6080        | 6138  | 6197  | 6255  |       |
| 41    | 6313     | 6371        | 6430  | 6488  | 6547  | 6605  | 6664        | 6722  | 6781  | 6839  |       |
| 42    | 6897     | 6955        | 7014  | 7072  | 7131  | 7189  | 7248        | 7306  | 7365  | 7423  |       |
| 43    | 7480     | 7539        | 7597  | 7655  | 7714  | 7772  | 7831        | 7889  | 7948  | 8006  |       |
| 44    | 8064     | 8123        | 8181  | 8240  | 8298  | 8357  | 8415        | 8474  | 8532  | 8591  |       |
| 45    | 8647     | 8705        | 8764  | 8822  | 8881  | 8939  | 8998        | 9056  | 9115  | 9173  |       |
| 46    | 9230     | 9289        | 9347  | 9405  | 9464  | 9522  | 9581        | 9639  | 9698  | 9756  |       |
| 47    | 9814     | 9872        | 9930  | 9988  | 10047 | 10105 | 10164       | 10222 | 10281 | 10339 |       |
| 48    | 872 0397 | 0455        | 0513  | 0571  | 0630  | 0688  | 0746        | 0805  | 0863  | 0921  |       |
| 49    | 0980     | 1038        | 1096  | 1155  | 1213  | 1271  | 1330        | 1388  | 1446  | 1505  |       |
| 7450  | 872 1563 | 1621        | 1679  | 1738  | 1796  | 1854  | 1913        | 1971  | 2030  | 2088  |       |
| N.    | 0        | 1           | 2     | 3     | 4     | 5     | 6           | 7     | 8     | 9     | P. P. |
| 74000 | mm       | 20° 33' 20" |       |       | 74000 | mm    | 20° 33' 20" |       |       |       |       |
| 74100 | mm       | 20 35 0     |       |       | 74100 | mm    | 20 35 0     |       |       |       |       |
| 74200 | mm       | 20 36 40    |       |       | 74200 | mm    | 20 36 40    |       |       |       |       |
| 74300 | mm       | 20 38 20    |       |       | 74300 | mm    | 20 38 20    |       |       |       |       |
| 74400 | mm       | 20 40 0     |       |       | 74400 | mm    | 20 40 0     |       |       |       |       |



| N.    | 0           | 1    | 2    | 3    | 4     | 5         | 6        | 7     | 8       | 9     | P. P.  |
|-------|-------------|------|------|------|-------|-----------|----------|-------|---------|-------|--------|
| 7450  | 872 1563    | 1621 | 1679 | 1738 | 1796  | 1854      | 1912     | 1971  | 2029    | 2087  |        |
| 51    | 2146        | 2204 | 2262 | 2320 | 2379  | 2437      | 2495     | 2554  | 2612    | 2670  |        |
| 52    | 2728        | 2787 | 2845 | 2903 | 2962  | 3020      | 3078     | 3136  | 3195    | 3253  |        |
| 53    | 3311        | 3369 | 3428 | 3486 | 3544  | 3603      | 3661     | 3719  | 3777    | 3836  |        |
| 54    | 3894        | 3952 | 4010 | 4069 | 4127  | 4185      | 4243     | 4302  | 4360    | 4418  |        |
| 55    | 4476        | 4535 | 4593 | 4651 | 4709  | 4768      | 4826     | 4884  | 4942    | 5001  |        |
| 56    | 5059        | 5117 | 5175 | 5234 | 5292  | 5350      | 5408     | 5467  | 5525    | 5583  |        |
| 57    | 5641        | 5700 | 5758 | 5816 | 5874  | 5933      | 5991     | 6049  | 6107    | 6166  |        |
| 58    | 6224        | 6282 | 6340 | 6398 | 6457  | 6515      | 6573     | 6631  | 6690    | 6748  |        |
| 59    | 6806        | 6864 | 6923 | 6981 | 7039  | 7097      | 7155     | 7214  | 7272    | 7330  |        |
| 7460  | 872 7388    | 7446 | 7505 | 7563 | 7621  | 7679      | 7738     | 7796  | 7854    | 7912  |        |
| 61    | 7970        | 8029 | 8087 | 8145 | 8203  | 8261      | 8320     | 8378  | 8436    | 8494  | 58     |
| 62    | 8552        | 8611 | 8669 | 8727 | 8785  | 8843      | 8902     | 8960  | 9018    | 9076  | 1 5.8  |
| 63    | 9134        | 9193 | 9251 | 9309 | 9367  | 9425      | 9484     | 9542  | 9600    | 9658  | 2 11.6 |
| 64    | 9716        | 9774 | 9833 | 9891 | 9949  | 10007     | 10065    | 10124 | 10182   | 10240 | 3 17.4 |
| 65    | 873 0298    | 0356 | 0414 | 0473 | 0531  | 0589      | 0647     | 0705  | 0764    | 0822  | 4 23.2 |
| 66    | 0880        | 0938 | 0996 | 1054 | 1113  | 1171      | 1229     | 1287  | 1345    | 1403  | 5 29.0 |
| 67    | 1462        | 1520 | 1578 | 1636 | 1694  | 1752      | 1810     | 1869  | 1927    | 1985  | 6 34.8 |
| 68    | 2043        | 2101 | 2159 | 2218 | 2276  | 2334      | 2392     | 2450  | 2508    | 2566  | 7 40.6 |
| 69    | 2625        | 2683 | 2741 | 2799 | 2857  | 2915      | 2973     | 3032  | 3090    | 3148  | 8 46.4 |
| 7470  | 873 3206    | 3264 | 3322 | 3380 | 3439  | 3497      | 3555     | 3613  | 3671    | 3729  | 9 52.2 |
| 71    | 3787        | 3845 | 3904 | 3962 | 4020  | 4078      | 4136     | 4194  | 4252    | 4311  |        |
| 72    | 4369        | 4427 | 4485 | 4543 | 4601  | 4659      | 4717     | 4775  | 4834    | 4892  |        |
| 73    | 4950        | 5008 | 5066 | 5124 | 5182  | 5240      | 5298     | 5357  | 5415    | 5473  |        |
| 74    | 5531        | 5589 | 5647 | 5705 | 5763  | 5821      | 5880     | 5938  | 5996    | 6054  |        |
| 75    | 6112        | 6170 | 6228 | 6286 | 6344  | 6402      | 6461     | 6519  | 6577    | 6635  |        |
| 76    | 6693        | 6751 | 6809 | 6867 | 6925  | 6983      | 7041     | 7100  | 7158    | 7216  |        |
| 77    | 7274        | 7332 | 7390 | 7448 | 7506  | 7564      | 7622     | 7680  | 7738    | 7797  |        |
| 78    | 7855        | 7913 | 7971 | 8029 | 8087  | 8145      | 8203     | 8261  | 8319    | 8377  |        |
| 79    | 8435        | 8493 | 8551 | 8610 | 8668  | 8726      | 8784     | 8842  | 8900    | 8958  |        |
| 7480  | 873 9016    | 9074 | 9132 | 9190 | 9248  | 9306      | 9364     | 9422  | 9480    | 9538  |        |
| 81    | 9597        | 9655 | 9713 | 9771 | 9829  | 9887      | 9945     | 10003 | 10061   | 10119 | 57     |
| 82    | 874 0177    | 0235 | 0293 | 0351 | 0409  | 0467      | 0525     | 0583  | 0641    | 0699  | 1 5.7  |
| 83    | 0757        | 0815 | 0874 | 0932 | 0990  | 1048      | 1106     | 1164  | 1222    | 1280  | 2 11.4 |
| 84    | 1338        | 1396 | 1454 | 1512 | 1570  | 1628      | 1686     | 1744  | 1802    | 1860  | 3 17.1 |
| 85    | 1918        | 1976 | 2034 | 2092 | 2150  | 2208      | 2266     | 2324  | 2382    | 2440  | 4 22.8 |
| 86    | 2498        | 2556 | 2614 | 2672 | 2730  | 2788      | 2846     | 2904  | 2962    | 3020  | 5 28.5 |
| 87    | 3078        | 3136 | 3194 | 3252 | 3310  | 3368      | 3426     | 3484  | 3542    | 3600  | 6 34.2 |
| 88    | 3658        | 3716 | 3774 | 3832 | 3890  | 3948      | 4006     | 4064  | 4122    | 4180  | 7 39.9 |
| 89    | 4238        | 4296 | 4354 | 4412 | 4470  | 4528      | 4586     | 4644  | 4702    | 4760  | 8 45.6 |
| 7490  | 874 4818    | 4876 | 4934 | 4992 | 5050  | 5108      | 5166     | 5224  | 5282    | 5340  | 9 51.3 |
| 91    | 5398        | 5456 | 5514 | 5572 | 5630  | 5688      | 5746     | 5804  | 5862    | 5920  |        |
| 92    | 5978        | 6036 | 6094 | 6152 | 6210  | 6268      | 6325     | 6383  | 6441    | 6499  |        |
| 93    | 6557        | 6615 | 6673 | 6731 | 6789  | 6847      | 6905     | 6963  | 7021    | 7079  |        |
| 94    | 7137        | 7195 | 7253 | 7311 | 7369  | 7427      | 7485     | 7543  | 7600    | 7658  |        |
| 95    | 7716        | 7774 | 7832 | 7890 | 7948  | 8006      | 8064     | 8122  | 8180    | 8238  |        |
| 96    | 8296        | 8354 | 8412 | 8470 | 8528  | 8585      | 8643     | 8701  | 8759    | 8817  |        |
| 97    | 8875        | 8933 | 8991 | 9049 | 9107  | 9165      | 9223     | 9281  | 9339    | 9396  |        |
| 98    | 9454        | 9512 | 9570 | 9628 | 9686  | 9744      | 9802     | 9860  | 9918    | 9976  |        |
| 99    | 875 0034    | 0091 | 0149 | 0207 | 0265  | 0323      | 0381     | 0439  | 0497    | 0555  |        |
| 7500  | 875 0613    | 0671 | 0728 | 0786 | 0844  | 0902      | 0960     | 1018  | 1076    | 1134  |        |
| N.    | 0           | 1    | 2    | 3    | 4     | 5         | 6        | 7     | 8       | 9     | P. P.  |
| 7450' | 20° 41' 40" |      |      |      | 7450' | 2° 4' 10" | S. 4.685 | 4804  | T. 7638 |       |        |
| 7460  | 20 43 20    |      |      |      | 7460  | 2 4 20    |          | 4802  | 7643    |       |        |
| 7470  | 20 45 0     |      |      |      | 7470  | 2 4 30    |          | 4799  | 7648    |       |        |
| 7480  | 20 46 40    |      |      |      | 7480  | 2 4 40    |          | 4797  | 7653    |       |        |
| 7490  | 20 48 20    |      |      |      | 7490  | 2 4 50    |          | 4794  | 7658    |       |        |



| N.    | 0          | 1    | 2    | 3    | 4     | 5        | 6           | 7       | 8    | 9    | P. P. |
|-------|------------|------|------|------|-------|----------|-------------|---------|------|------|-------|
| 7500  | 875 0613   | 0671 | 0728 | 0786 | 0844  | 0902     | 0960        | 1018    | 1076 | 1134 |       |
| 01    | 1192       | 1250 | 1307 | 1365 | 1423  | 1481     | 1539        | 1597    | 1655 | 1713 |       |
| 02    | 1771       | 1828 | 1886 | 1943 | 2001  | 2059     | 2117        | 2175    | 2233 | 2291 |       |
| 03    | 2349       | 2407 | 2465 | 2523 | 2581  | 2639     | 2697        | 2755    | 2813 | 2871 |       |
| 04    | 2928       | 2986 | 3044 | 3102 | 3160  | 3218     | 3276        | 3334    | 3392 | 3450 |       |
| 05    | 3507       | 3565 | 3623 | 3681 | 3739  | 3797     | 3855        | 3913    | 3971 | 4029 |       |
| 06    | 4086       | 4143 | 4201 | 4259 | 4317  | 4375     | 4433        | 4491    | 4549 | 4607 |       |
| 07    | 4664       | 4722 | 4780 | 4838 | 4896  | 4954     | 5012        | 5070    | 5128 | 5186 |       |
| 08    | 5243       | 5300 | 5358 | 5416 | 5474  | 5532     | 5590        | 5648    | 5706 | 5764 |       |
| 09    | 5821       | 5879 | 5937 | 5995 | 6053  | 6111     | 6169        | 6227    | 6285 | 6343 |       |
| 7510  | 875 6399   | 6457 | 6515 | 6573 | 6631  | 6689     | 6747        | 6805    | 6863 | 6921 |       |
| 11    | 6978       | 7035 | 7093 | 7151 | 7209  | 7267     | 7325        | 7383    | 7441 | 7499 |       |
| 12    | 7556       | 7614 | 7671 | 7729 | 7787  | 7845     | 7903        | 7961    | 8019 | 8077 |       |
| 13    | 8134       | 8192 | 8249 | 8307 | 8365  | 8423     | 8481        | 8539    | 8597 | 8655 |       |
| 14    | 8712       | 8770 | 8828 | 8886 | 8944  | 9002     | 9060        | 9118    | 9176 | 9234 |       |
| 15    | 9290       | 9348 | 9405 | 9463 | 9521  | 9579     | 9637        | 9695    | 9753 | 9811 |       |
| 16    | 9868       | 9925 | 9983 | 0041 | 0099  | 0157     | 0215        | 0273    | 0331 | 0389 |       |
| 17    | 876 0346   | 0403 | 0461 | 0519 | 0577  | 0635     | 0693        | 0751    | 0809 | 0867 |       |
| 18    | 1023       | 1081 | 1139 | 1197 | 1254  | 1312     | 1370        | 1428    | 1486 | 1544 |       |
| 19    | 1601       | 1659 | 1716 | 1774 | 1832  | 1890     | 1948        | 2006    | 2064 | 2122 |       |
| 7520  | 876 2178   | 2236 | 2294 | 2352 | 2409  | 2467     | 2525        | 2583    | 2641 | 2699 |       |
| 21    | 2756       | 2814 | 2871 | 2929 | 2987  | 3045     | 3103        | 3161    | 3219 | 3277 |       |
| 22    | 3333       | 3391 | 3449 | 3506 | 3564  | 3622     | 3680        | 3738    | 3796 | 3854 |       |
| 23    | 3911       | 3968 | 4026 | 4084 | 4142  | 4200     | 4258        | 4316    | 4374 | 4432 |       |
| 24    | 4488       | 4546 | 4603 | 4661 | 4719  | 4777     | 4835        | 4893    | 4951 | 5009 |       |
| 25    | 5065       | 5123 | 5180 | 5238 | 5296  | 5354     | 5412        | 5470    | 5528 | 5586 |       |
| 26    | 5642       | 5700 | 5758 | 5815 | 5873  | 5931     | 5989        | 6047    | 6105 | 6163 |       |
| 27    | 6219       | 6277 | 6335 | 6393 | 6451  | 6509     | 6567        | 6625    | 6683 | 6741 |       |
| 28    | 6796       | 6854 | 6912 | 6969 | 7027  | 7085     | 7143        | 7201    | 7259 | 7317 |       |
| 29    | 7373       | 7431 | 7488 | 7546 | 7604  | 7662     | 7720        | 7778    | 7836 | 7894 |       |
| 7530  | 876 7950   | 8007 | 8065 | 8123 | 8181  | 8239     | 8297        | 8355    | 8413 | 8471 |       |
| 31    | 8526       | 8584 | 8642 | 8699 | 8757  | 8815     | 8873        | 8931    | 8989 | 9047 |       |
| 32    | 9101       | 9159 | 9217 | 9275 | 9333  | 9391     | 9449        | 9507    | 9565 | 9623 |       |
| 33    | 9680       | 9737 | 9795 | 9853 | 9911  | 9969     | 0027        | 0085    | 0143 | 0201 |       |
| 34    | 877 0256   | 0314 | 0371 | 0429 | 0487  | 0545     | 0603        | 0661    | 0719 | 0777 |       |
| 35    | 0833       | 0890 | 0948 | 1005 | 1063  | 1121     | 1179        | 1237    | 1295 | 1353 |       |
| 36    | 1409       | 1467 | 1524 | 1582 | 1640  | 1698     | 1756        | 1814    | 1872 | 1930 |       |
| 37    | 1988       | 2043 | 2100 | 2158 | 2216  | 2274     | 2332        | 2390    | 2448 | 2506 |       |
| 38    | 2561       | 2619 | 2677 | 2734 | 2792  | 2850     | 2908        | 2966    | 3024 | 3082 |       |
| 39    | 3137       | 3195 | 3253 | 3310 | 3368  | 3426     | 3484        | 3542    | 3600 | 3658 |       |
| 7540  | 877 3713   | 3771 | 3829 | 3886 | 3944  | 4002     | 4060        | 4118    | 4176 | 4234 |       |
| 41    | 4289       | 4347 | 4405 | 4463 | 4521  | 4579     | 4637        | 4695    | 4753 | 4811 |       |
| 42    | 4865       | 4923 | 4980 | 5038 | 5096  | 5154     | 5212        | 5270    | 5328 | 5386 |       |
| 43    | 5441       | 5499 | 5556 | 5614 | 5672  | 5730     | 5788        | 5846    | 5904 | 5962 |       |
| 44    | 6017       | 6074 | 6132 | 6189 | 6247  | 6305     | 6363        | 6421    | 6479 | 6537 |       |
| 45    | 6593       | 6650 | 6708 | 6765 | 6823  | 6881     | 6939        | 6997    | 7055 | 7113 |       |
| 46    | 7168       | 7226 | 7283 | 7341 | 7398  | 7456     | 7514        | 7572    | 7630 | 7688 |       |
| 47    | 7743       | 7801 | 7859 | 7916 | 7974  | 8032     | 8090        | 8148    | 8206 | 8264 |       |
| 48    | 8319       | 8376 | 8434 | 8492 | 8549  | 8607     | 8665        | 8723    | 8781 | 8839 |       |
| 49    | 8894       | 8952 | 9009 | 9067 | 9124  | 9182     | 9240        | 9298    | 9356 | 9414 |       |
| 7550  | 877 9470   | 9527 | 9585 | 9642 | 9700  | 9757     | 9815        | 9873    | 9931 | 9989 |       |
| N.    | 0          | 1    | 2    | 3    | 4     | 5        | 6           | 7       | 8    | 9    | P. P. |
| 75000 | 20° 50' 0" |      |      |      | 75000 | 2° 5' 0" | 2.4 4.8 7.2 | 9.6     | 12.0 |      |       |
| 75100 | 20 51 40   |      |      |      | 75100 | 2 5 10   |             | 4.8 7.2 | 9.6  |      |       |
| 75200 | 20 53 20   |      |      |      | 75200 | 2 5 20   |             | 4.8 7.2 | 9.6  |      |       |
| 75300 | 20 55 0    |      |      |      | 75300 | 2 5 30   |             | 4.8 7.2 | 9.6  |      |       |
| 75400 | 20 56 40   |      |      |      | 75400 | 2 5 40   |             | 4.8 7.2 | 9.6  |      |       |



| N.    | 0             | 1    | 2    | 3     | 4           | 5    | 6    | 7        | 8    | 9       | P. P.  |
|-------|---------------|------|------|-------|-------------|------|------|----------|------|---------|--------|
| 7550  | 877 9470      | 9527 | 9585 | 9642  | 9700        | 9757 | 9815 | 9872     | 9930 | 9987    |        |
| 51    | 878 0045      | 0102 | 0160 | 0217  | 0275        | 0332 | 0390 | 0447     | 0505 | 0562    |        |
| 52    | 0620          | 0677 | 0735 | 0792  | 0850        | 0907 | 0965 | 1022     | 1080 | 1137    |        |
| 53    | 1195          | 1252 | 1310 | 1367  | 1425        | 1482 | 1540 | 1597     | 1655 | 1712    |        |
| 54    | 1770          | 1827 | 1885 | 1942  | 2000        | 2057 | 2115 | 2172     | 2230 | 2287    |        |
| 55    | 2345          | 2402 | 2460 | 2517  | 2575        | 2632 | 2690 | 2747     | 2805 | 2862    |        |
| 56    | 2919          | 2977 | 3034 | 3092  | 3149        | 3207 | 3264 | 3322     | 3379 | 3437    |        |
| 57    | 3494          | 3552 | 3609 | 3667  | 3724        | 3782 | 3839 | 3896     | 3954 | 4011    |        |
| 58    | 4069          | 4126 | 4184 | 4241  | 4299        | 4356 | 4414 | 4471     | 4529 | 4586    |        |
| 59    | 4643          | 4701 | 4758 | 4816  | 4873        | 4931 | 4988 | 5046     | 5103 | 5161    |        |
| 7560  | 878 5218      | 5275 | 5333 | 5390  | 5448        | 5505 | 5563 | 5620     | 5678 | 5735    |        |
| 61    | 5792          | 5850 | 5907 | 5965  | 6022        | 6080 | 6137 | 6194     | 6252 | 6309    | 58     |
| 62    | 6367          | 6424 | 6482 | 6539  | 6596        | 6654 | 6711 | 6769     | 6826 | 6884    | 1 5.8  |
| 63    | 6941          | 6998 | 7056 | 7113  | 7171        | 7228 | 7286 | 7343     | 7400 | 7458    | 2 11.6 |
| 64    | 7515          | 7573 | 7630 | 7687  | 7745        | 7802 | 7860 | 7917     | 7975 | 8032    | 3 17.4 |
| 65    | 8089          | 8147 | 8204 | 8262  | 8319        | 8376 | 8434 | 8491     | 8549 | 8606    | 4 23.2 |
| 66    | 8663          | 8721 | 8778 | 8836  | 8893        | 8950 | 9008 | 9065     | 9123 | 9180    | 5 29.0 |
| 67    | 9237          | 9295 | 9352 | 9410  | 9467        | 9524 | 9582 | 9639     | 9696 | 9754    | 6 34.8 |
| 68    | 9811          | 9869 | 9926 | 9983  | 0041        | 0098 | 0156 | 0213     | 0270 | 0328    | 7 40.6 |
| 69    | 879 0385      | 0442 | 0500 | 0557  | 0615        | 0672 | 0729 | 0787     | 0844 | 0901    | 8 46.4 |
| 7570  | 879 0959      | 1016 | 1074 | 1131  | 1188        | 1246 | 1303 | 1360     | 1418 | 1475    | 9 52.2 |
| 71    | 1532          | 1590 | 1647 | 1705  | 1762        | 1819 | 1877 | 1934     | 1991 | 2049    |        |
| 72    | 2106          | 2163 | 2221 | 2278  | 2335        | 2393 | 2450 | 2508     | 2565 | 2622    |        |
| 73    | 2680          | 2737 | 2794 | 2852  | 2909        | 2966 | 3024 | 3081     | 3138 | 3196    |        |
| 74    | 3253          | 3310 | 3368 | 3425  | 3482        | 3540 | 3597 | 3654     | 3712 | 3769    |        |
| 75    | 3826          | 3884 | 3941 | 3998  | 4056        | 4113 | 4170 | 4228     | 4285 | 4342    |        |
| 76    | 4400          | 4457 | 4514 | 4572  | 4629        | 4686 | 4744 | 4801     | 4858 | 4916    |        |
| 77    | 4973          | 5030 | 5088 | 5145  | 5202        | 5259 | 5317 | 5374     | 5431 | 5489    |        |
| 78    | 5546          | 5603 | 5661 | 5718  | 5775        | 5833 | 5890 | 5947     | 6004 | 6062    |        |
| 79    | 6119          | 6176 | 6234 | 6291  | 6348        | 6406 | 6463 | 6520     | 6577 | 6635    |        |
| 7580  | 879 6692      | 6749 | 6807 | 6864  | 6921        | 6979 | 7036 | 7093     | 7150 | 7208    |        |
| 81    | 7265          | 7322 | 7380 | 7437  | 7494        | 7551 | 7609 | 7666     | 7723 | 7781    | 57     |
| 82    | 7838          | 7895 | 7952 | 8010  | 8067        | 8124 | 8181 | 8239     | 8296 | 8353    | 1 5.7  |
| 83    | 8411          | 8468 | 8525 | 8582  | 8640        | 8697 | 8754 | 8811     | 8869 | 8926    | 2 11.4 |
| 84    | 8983          | 9041 | 9098 | 9155  | 9212        | 9270 | 9327 | 9384     | 9441 | 9499    | 3 17.1 |
| 85    | 9556          | 9613 | 9670 | 9728  | 9785        | 9842 | 9899 | 9957     | 0014 | 0071    | 4 22.8 |
| 86    | 880 0128      | 0186 | 0243 | 0300  | 0357        | 0415 | 0472 | 0529     | 0586 | 0644    | 5 28.5 |
| 87    | 0701          | 0758 | 0815 | 0873  | 0930        | 0987 | 1044 | 1102     | 1159 | 1216    | 6 34.2 |
| 88    | 1273          | 1330 | 1388 | 1445  | 1502        | 1559 | 1617 | 1674     | 1731 | 1788    | 7 39.9 |
| 89    | 1846          | 1903 | 1960 | 2017  | 2074        | 2132 | 2189 | 2246     | 2303 | 2361    | 8 45.6 |
| 7590  | 880 2418      | 2475 | 2532 | 2589  | 2647        | 2704 | 2761 | 2818     | 2875 | 2933    | 9 51.3 |
| 91    | 2990          | 3047 | 3104 | 3162  | 3219        | 3276 | 3333 | 3390     | 3448 | 3505    |        |
| 92    | 3562          | 3619 | 3676 | 3734  | 3791        | 3848 | 3905 | 3962     | 4020 | 4077    |        |
| 93    | 4134          | 4191 | 4248 | 4306  | 4363        | 4420 | 4477 | 4534     | 4592 | 4649    |        |
| 94    | 4706          | 4763 | 4820 | 4877  | 4935        | 4992 | 5049 | 5106     | 5163 | 5221    |        |
| 95    | 5278          | 5335 | 5392 | 5449  | 5507        | 5564 | 5621 | 5678     | 5735 | 5792    |        |
| 96    | 5850          | 5907 | 5964 | 6021  | 6078        | 6135 | 6193 | 6250     | 6307 | 6364    |        |
| 97    | 6421          | 6478 | 6536 | 6593  | 6650        | 6707 | 6764 | 6821     | 6879 | 6936    |        |
| 98    | 6993          | 7050 | 7107 | 7164  | 7222        | 7279 | 7336 | 7393     | 7450 | 7507    |        |
| 99    | 7564          | 7622 | 7679 | 7736  | 7793        | 7850 | 7907 | 7964     | 8022 | 8079    |        |
| 7600  | 880 8136      | 8193 | 8250 | 8307  | 8364        | 8422 | 8479 | 8536     | 8593 | 8650    |        |
| N.    | 0             | 1    | 2    | 3     | 4           | 5    | 6    | 7        | 8    | 9       | P. P.  |
| 7550" | = 20° 58' 20" |      |      | 7550" | = 2° 5' 50" |      |      | S. 4.685 | 4779 | T. 7689 |        |
| 75600 | = 21 0 0      |      |      | 75600 | = 2 6 0     |      |      |          | 4776 | 7694    |        |
| 75700 | = 21 1 40     |      |      | 75700 | = 2 6 10    |      |      |          | 4774 | 7699    |        |
| 75800 | = 21 3 20     |      |      | 75800 | = 2 6 20    |      |      |          | 4771 | 7704    |        |
| 75900 | = 21 5 0      |      |      | 75900 | = 2 6 30    |      |      |          | 4769 | 7709    |        |



| N.    | 0            | 1    | 2    | 3    | 4    | 5           | 6    | 7    | 8    | 9        | P. P.        |
|-------|--------------|------|------|------|------|-------------|------|------|------|----------|--------------|
| 7600  | 880 8136     | 8193 | 8150 | 8307 | 8364 | 8422        | 8479 | 8536 | 8593 | 8650     |              |
| 01    | 8707         | 8764 | 8822 | 8879 | 8936 | 8993        | 9050 | 9107 | 9164 | 9222     |              |
| 02    | 9279         | 9336 | 9393 | 9450 | 9507 | 9564        | 9621 | 9679 | 9736 | 9793     |              |
| 03    | 9850         | 9907 | 9964 | 0021 | 0078 | 0136        | 0193 | 0250 | 0307 | 0364     |              |
| 04    | 881 0421     | 0478 | 0535 | 0592 | 0650 | 0707        | 0764 | 0821 | 0878 | 0935     |              |
| 05    | 0992         | 1049 | 1106 | 1163 | 1221 | 1278        | 1335 | 1392 | 1449 | 1506     |              |
| 06    | 1563         | 1620 | 1677 | 1735 | 1792 | 1849        | 1906 | 1963 | 2020 | 2077     |              |
| 07    | 2134         | 2191 | 2248 | 2305 | 2363 | 2420        | 2477 | 2534 | 2591 | 2648     |              |
| 08    | 2705         | 2762 | 2819 | 2876 | 2933 | 2990        | 3048 | 3105 | 3162 | 3219     |              |
| 09    | 3276         | 3333 | 3390 | 3447 | 3504 | 3561        | 3618 | 3675 | 3732 | 3789     |              |
| 7610  | 881 3847     | 3904 | 3961 | 4018 | 4075 | 4132        | 4189 | 4246 | 4303 | 4360     |              |
| 11    | 4417         | 4474 | 4531 | 4588 | 4645 | 4703        | 4760 | 4817 | 4874 | 4931     | 58           |
| 12    | 4988         | 5045 | 5102 | 5159 | 5216 | 5273        | 5330 | 5387 | 5444 | 5501     | 1 5.8        |
| 13    | 5558         | 5615 | 5672 | 5729 | 5786 | 5844        | 5901 | 5958 | 6015 | 6072     | 2 11.6       |
| 14    | 6129         | 6186 | 6243 | 6300 | 6357 | 6414        | 6471 | 6528 | 6585 | 6642     | 3 17.4       |
| 15    | 6699         | 6756 | 6813 | 6870 | 6927 | 6984        | 7041 | 7098 | 7155 | 7212     | 4 23.2       |
| 16    | 7269         | 7326 | 7383 | 7440 | 7497 | 7554        | 7611 | 7669 | 7726 | 7783     | 5 29.0       |
| 17    | 7840         | 7897 | 7954 | 8011 | 8068 | 8125        | 8182 | 8239 | 8296 | 8353     | 6 34.8       |
| 18    | 8410         | 8467 | 8524 | 8581 | 8638 | 8695        | 8752 | 8809 | 8866 | 8923     | 7 40.6       |
| 19    | 8980         | 9037 | 9094 | 9151 | 9208 | 9265        | 9322 | 9379 | 9436 | 9493     | 8 46.4       |
| 7620  | 881 9550     | 9607 | 9664 | 9721 | 9778 | 9835        | 9892 | 9949 | 0006 | 0063     | 9 52.2       |
| 21    | 882 0120     | 0177 | 0234 | 0291 | 0348 | 0405        | 0462 | 0519 | 0575 | 0632     |              |
| 22    | 0689         | 0746 | 0803 | 0860 | 0917 | 0974        | 1031 | 1088 | 1145 | 1202     |              |
| 23    | 1259         | 1316 | 1373 | 1430 | 1487 | 1544        | 1601 | 1658 | 1715 | 1772     |              |
| 24    | 1829         | 1886 | 1943 | 2000 | 2057 | 2114        | 2171 | 2228 | 2285 | 2342     |              |
| 25    | 2398         | 2455 | 2512 | 2569 | 2626 | 2683        | 2740 | 2797 | 2854 | 2911     |              |
| 26    | 2968         | 3025 | 3082 | 3139 | 3196 | 3253        | 3310 | 3367 | 3424 | 3481     |              |
| 27    | 3537         | 3594 | 3651 | 3708 | 3765 | 3822        | 3879 | 3936 | 3993 | 4050     |              |
| 28    | 4107         | 4164 | 4221 | 4278 | 4335 | 4392        | 4448 | 4505 | 4562 | 4619     |              |
| 29    | 4676         | 4733 | 4790 | 4847 | 4904 | 4961        | 5018 | 5075 | 5132 | 5188     |              |
| 7630  | 882 5245     | 5302 | 5359 | 5416 | 5473 | 5530        | 5587 | 5644 | 5701 | 5758     |              |
| 31    | 5815         | 5871 | 5928 | 5985 | 6042 | 6099        | 6156 | 6213 | 6270 | 6327     | 57           |
| 32    | 6384         | 6441 | 6497 | 6554 | 6611 | 6668        | 6725 | 6782 | 6839 | 6896     | 1 5.7        |
| 33    | 6953         | 7010 | 7066 | 7123 | 7180 | 7237        | 7294 | 7351 | 7408 | 7465     | 2 11.4       |
| 34    | 7522         | 7578 | 7635 | 7692 | 7749 | 7806        | 7863 | 7920 | 7977 | 8034     | 3 17.1       |
| 35    | 8090         | 8147 | 8204 | 8261 | 8318 | 8375        | 8432 | 8489 | 8545 | 8602     | 4 22.8       |
| 36    | 8659         | 8716 | 8773 | 8830 | 8887 | 8944        | 9000 | 9057 | 9114 | 9171     | 5 28.5       |
| 37    | 9228         | 9285 | 9342 | 9399 | 9455 | 9512        | 9569 | 9626 | 9683 | 9740     | 6 34.2       |
| 38    | 9797         | 9853 | 9910 | 9967 | 0024 | 0081        | 0138 | 0195 | 0251 | 0308     | 7 39.9       |
| 39    | 883 0365     | 0422 | 0479 | 0536 | 0593 | 0649        | 0706 | 0763 | 0820 | 0877     | 8 45.6       |
| 7640  | 883 0934     | 0990 | 1047 | 1104 | 1161 | 1218        | 1275 | 1331 | 1388 | 1445     | 9 51.3       |
| 41    | 1502         | 1559 | 1616 | 1673 | 1729 | 1786        | 1843 | 1900 | 1957 | 2014     |              |
| 42    | 2070         | 2127 | 2184 | 2241 | 2298 | 2354        | 2411 | 2468 | 2525 | 2582     |              |
| 43    | 2639         | 2695 | 2752 | 2809 | 2866 | 2923        | 2980 | 3036 | 3093 | 3150     |              |
| 44    | 3207         | 3264 | 3320 | 3377 | 3434 | 3491        | 3548 | 3604 | 3661 | 3718     |              |
| 45    | 3775         | 3832 | 3889 | 3945 | 4002 | 4059        | 4116 | 4173 | 4229 | 4286     |              |
| 46    | 4343         | 4400 | 4457 | 4513 | 4570 | 4627        | 4684 | 4741 | 4797 | 4854     |              |
| 47    | 4911         | 4968 | 5024 | 5081 | 5138 | 5195        | 5252 | 5308 | 5365 | 5422     |              |
| 48    | 5479         | 5536 | 5592 | 5649 | 5706 | 5763        | 5819 | 5876 | 5933 | 5990     |              |
| 49    | 6047         | 6103 | 6160 | 6217 | 6274 | 6330        | 6387 | 6444 | 6501 | 6558     |              |
| 7650  | 883 6614     | 6671 | 6728 | 6785 | 6841 | 6898        | 6955 | 7012 | 7068 | 7125     |              |
| N.    | 0            | 1    | 2    | 3    | 4    | 5           | 6    | 7    | 8    | 9        | P. P.        |
| 76000 | = 21° 6' 40" |      |      |      | 7600 | = 2° 6' 40" |      |      |      | S. 4.685 | 4766 T. 7715 |
| 76100 | = 21 8 20    |      |      |      | 7610 | = 2 6 30    |      |      |      |          | 4763 7720    |
| 76200 | = 21 10 0    |      |      |      | 7620 | = 2 7 0     |      |      |      |          | 4761 7725    |
| 76300 | = 21 11 40   |      |      |      | 7630 | = 2 7 10    |      |      |      |          | 4758 7730    |
| 76400 | = 21 13 20   |      |      |      | 7640 | = 2 7 20    |      |      |      |          | 4756 7735    |



| N.    | 0            | 1    | 2    | 3    | 4     | 5           | 6    | 7    | 8    | 9       | P. P.        |
|-------|--------------|------|------|------|-------|-------------|------|------|------|---------|--------------|
| 7650  | 883 6614     | 6671 | 6728 | 6785 | 6841  | 6898        | 6955 | 7012 | 7068 | 7125    |              |
| 51    | 7182         | 7239 | 7296 | 7352 | 7409  | 7466        | 7523 | 7579 | 7636 | 7693    |              |
| 52    | 7750         | 7806 | 7863 | 7920 | 7977  | 8033        | 8090 | 8147 | 8204 | 8260    |              |
| 53    | 8317         | 8374 | 8431 | 8487 | 8544  | 8601        | 8658 | 8714 | 8771 | 8828    |              |
| 54    | 8885         | 8941 | 8998 | 9055 | 9112  | 9168        | 9225 | 9282 | 9338 | 9395    |              |
| 55    | 9452         | 9509 | 9565 | 9622 | 9679  | 9736        | 9792 | 9849 | 9906 | 9963    |              |
| 56    | 884 0019     | 0076 | 0133 | 0189 | 0246  | 0303        | 0360 | 0416 | 0473 | 0530    |              |
| 57    | 0586         | 0643 | 0700 | 0757 | 0813  | 0870        | 0927 | 0983 | 1040 | 1097    |              |
| 58    | 1154         | 1210 | 1267 | 1324 | 1380  | 1437        | 1494 | 1551 | 1607 | 1664    |              |
| 59    | 1721         | 1777 | 1834 | 1891 | 1948  | 2004        | 2061 | 2118 | 2174 | 2231    |              |
| 7660  | 884 2288     | 2344 | 2401 | 2458 | 2514  | 2571        | 2628 | 2685 | 2741 | 2798    |              |
| 61    | 2855         | 2911 | 2968 | 3025 | 3081  | 3138        | 3195 | 3251 | 3308 | 3365    | 57           |
| 62    | 3421         | 3478 | 3535 | 3592 | 3648  | 3705        | 3762 | 3818 | 3875 | 3932    | 1 5.7        |
| 63    | 3988         | 4045 | 4102 | 4158 | 4215  | 4272        | 4328 | 4385 | 4442 | 4498    | 2 11.4       |
| 64    | 4555         | 4612 | 4668 | 4725 | 4782  | 4838        | 4895 | 4952 | 5008 | 5065    | 3 17.1       |
| 65    | 5122         | 5178 | 5235 | 5292 | 5348  | 5405        | 5462 | 5518 | 5575 | 5631    | 4 22.8       |
| 66    | 5688         | 5745 | 5801 | 5858 | 5915  | 5971        | 6028 | 6085 | 6141 | 6198    | 5 28.5       |
| 67    | 6255         | 6311 | 6368 | 6425 | 6481  | 6538        | 6594 | 6651 | 6708 | 6764    | 6 34.2       |
| 68    | 6821         | 6878 | 6934 | 6991 | 7048  | 7104        | 7161 | 7217 | 7274 | 7331    | 7 39.9       |
| 69    | 7387         | 7444 | 7501 | 7557 | 7614  | 7671        | 7727 | 7784 | 7840 | 7897    | 8 45.6       |
| 7670  | 884 7954     | 8010 | 8067 | 8124 | 8180  | 8237        | 8293 | 8350 | 8407 | 8463    | 9 51.3       |
| 71    | 8520         | 8576 | 8633 | 8690 | 8746  | 8803        | 8860 | 8916 | 8973 | 9029    |              |
| 72    | 9086         | 9143 | 9199 | 9256 | 9312  | 9369        | 9426 | 9482 | 9539 | 9595    |              |
| 73    | 9652         | 9709 | 9765 | 9822 | 9878  | 9935        | 9992 | 0048 | 0105 | 0161    |              |
| 74    | 885 0218     | 0275 | 0331 | 0388 | 0444  | 0501        | 0557 | 0614 | 0671 | 0727    |              |
| 75    | 0784         | 0840 | 0897 | 0954 | 1010  | 1067        | 1123 | 1180 | 1237 | 1293    |              |
| 76    | 1350         | 1406 | 1463 | 1519 | 1576  | 1633        | 1689 | 1746 | 1802 | 1859    |              |
| 77    | 1915         | 1972 | 2029 | 2085 | 2142  | 2198        | 2255 | 2311 | 2368 | 2425    |              |
| 78    | 2481         | 2538 | 2594 | 2651 | 2707  | 2764        | 2820 | 2877 | 2934 | 2990    |              |
| 79    | 3047         | 3103 | 3160 | 3216 | 3273  | 3329        | 3386 | 3443 | 3499 | 3556    |              |
| 7680  | 885 3612     | 3669 | 3725 | 3782 | 3838  | 3895        | 3951 | 4008 | 4065 | 4121    |              |
| 81    | 4178         | 4234 | 4291 | 4347 | 4404  | 4460        | 4517 | 4573 | 4630 | 4686    | 56           |
| 82    | 4743         | 4800 | 4856 | 4913 | 4969  | 5026        | 5082 | 5139 | 5195 | 5252    | 1 5.6        |
| 83    | 5308         | 5365 | 5421 | 5478 | 5534  | 5591        | 5647 | 5704 | 5761 | 5817    | 2 11.2       |
| 84    | 5874         | 5930 | 5987 | 6043 | 6100  | 6156        | 6213 | 6269 | 6326 | 6382    | 3 16.8       |
| 85    | 6439         | 6495 | 6552 | 6608 | 6665  | 6721        | 6778 | 6834 | 6891 | 6947    | 4 22.4       |
| 86    | 7004         | 7060 | 7117 | 7173 | 7230  | 7286        | 7343 | 7399 | 7456 | 7512    | 5 28.0       |
| 87    | 7569         | 7625 | 7682 | 7738 | 7795  | 7851        | 7908 | 7964 | 8021 | 8077    | 6 33.6       |
| 88    | 8134         | 8190 | 8247 | 8303 | 8360  | 8416        | 8473 | 8529 | 8586 | 8642    | 7 39.2       |
| 89    | 8699         | 8755 | 8812 | 8868 | 8925  | 8981        | 9037 | 9094 | 9150 | 9207    | 8 44.8       |
| 7690  | 885 9263     | 9320 | 9376 | 9433 | 9489  | 9546        | 9602 | 9659 | 9715 | 9772    | 9 50.4       |
| 91    | 9828         | 9885 | 9941 | 9998 | 0054  | 0110        | 0167 | 0223 | 0280 | 0336    |              |
| 92    | 886 0393     | 0449 | 0506 | 0562 | 0619  | 0675        | 0732 | 0788 | 0844 | 0901    |              |
| 93    | 0957         | 1014 | 1070 | 1127 | 1183  | 1240        | 1296 | 1352 | 1409 | 1465    |              |
| 94    | 1522         | 1578 | 1635 | 1691 | 1748  | 1804        | 1860 | 1917 | 1973 | 2030    |              |
| 95    | 2086         | 2143 | 2199 | 2256 | 2312  | 2368        | 2425 | 2481 | 2538 | 2594    |              |
| 96    | 2651         | 2707 | 2763 | 2820 | 2876  | 2933        | 2989 | 3046 | 3102 | 3158    |              |
| 97    | 3215         | 3271 | 3328 | 3384 | 3441  | 3497        | 3553 | 3610 | 3666 | 3723    |              |
| 98    | 3779         | 3835 | 3892 | 3948 | 4005  | 4061        | 4118 | 4174 | 4230 | 4287    |              |
| 99    | 886 4343     | 4400 | 4456 | 4512 | 4569  | 4625        | 4682 | 4738 | 4794 | 4851    |              |
| 7700  | 886 4907     | 4964 | 5020 | 5076 | 5133  | 5189        | 5246 | 5302 | 5358 | 5415    |              |
| N.    | 0            | 1    | 2    | 3    | 4     | 5           | 6    | 7    | 8    | 9       | P. P.        |
| 76500 | = 21° 15' 0" |      |      |      | 76500 | = 2° 7' 30" |      |      |      | 8.4.685 | 4753 T. 7741 |
| 76600 | = 21 16 40   |      |      |      | 76600 | = 2 7 40    |      |      |      |         | 4750 7746    |
| 76700 | = 21 18 20   |      |      |      | 76700 | = 2 7 50    |      |      |      |         | 4748 7751    |
| 76800 | = 21 20 0    |      |      |      | 76800 | = 2 8 0     |      |      |      |         | 4745 7756    |
| 76900 | = 21 21 40   |      |      |      | 76900 | = 2 8 10    |      |      |      |         | 4743 7761    |



| N.    | 0             | 1    | 2    | 3     | 4           | 5    | 6    | 7                     | 8    | 9    | P. P.  |
|-------|---------------|------|------|-------|-------------|------|------|-----------------------|------|------|--------|
| 7700  | 886 4907      | 4964 | 5020 | 5076  | 5133        | 5189 | 5246 | 5302                  | 5358 | 5415 |        |
| 01    | 5471          | 5528 | 5584 | 5640  | 5697        | 5753 | 5810 | 5866                  | 5922 | 5979 |        |
| 02    | 6035          | 6092 | 6148 | 6204  | 6261        | 6317 | 6373 | 6430                  | 6486 | 6543 |        |
| 03    | 6599          | 6655 | 6712 | 6768  | 6824        | 6881 | 6937 | 6994                  | 7050 | 7106 |        |
| 04    | 7163          | 7219 | 7275 | 7332  | 7388        | 7445 | 7501 | 7557                  | 7614 | 7670 |        |
| 05    | 7726          | 7783 | 7839 | 7896  | 7952        | 8008 | 8065 | 8121                  | 8177 | 8234 |        |
| 06    | 8290          | 8346 | 8403 | 8459  | 8515        | 8572 | 8628 | 8685                  | 8741 | 8797 |        |
| 07    | 8854          | 8910 | 8966 | 9023  | 9079        | 9135 | 9192 | 9248                  | 9304 | 9361 |        |
| 08    | 9417          | 9473 | 9530 | 9586  | 9642        | 9699 | 9755 | 9811                  | 9868 | 9924 |        |
| 09    | 9980          | 0037 | 0093 | 0149  | 0206        | 0262 | 0318 | 0375                  | 0431 | 0487 |        |
| 7710  | 887 0544      | 0600 | 0656 | 0713  | 0769        | 0825 | 0882 | 0938                  | 0994 | 1051 |        |
| 11    | 1107          | 1163 | 1220 | 1276  | 1332        | 1389 | 1445 | 1501                  | 1558 | 1614 |        |
| 12    | 1670          | 1727 | 1783 | 1839  | 1895        | 1952 | 2008 | 2064                  | 2121 | 2177 | 57     |
| 13    | 2233          | 2290 | 2346 | 2402  | 2459        | 2515 | 2571 | 2627                  | 2684 | 2740 | 1 5.7  |
| 14    | 2796          | 2853 | 2909 | 2965  | 3022        | 3078 | 3134 | 3190                  | 3247 | 3303 | 2 11.4 |
| 15    | 3359          | 3416 | 3472 | 3528  | 3584        | 3641 | 3697 | 3753                  | 3810 | 3866 | 3 17.1 |
| 16    | 3922          | 3978 | 4035 | 4091  | 4147        | 4204 | 4260 | 4316                  | 4372 | 4429 | 4 22.8 |
| 17    | 4485          | 4541 | 4598 | 4654  | 4710        | 4766 | 4823 | 4879                  | 4935 | 4991 | 5 28.5 |
| 18    | 5048          | 5104 | 5160 | 5217  | 5273        | 5329 | 5385 | 5442                  | 5498 | 5554 | 6 34.2 |
| 19    | 5610          | 5667 | 5723 | 5779  | 5835        | 5892 | 5948 | 6004                  | 6060 | 6117 | 7 39.9 |
| 7720  | 887 6173      | 6229 | 6286 | 6342  | 6398        | 6454 | 6511 | 6567                  | 6623 | 6679 | 8 45.6 |
| 21    | 6736          | 6792 | 6848 | 6904  | 6961        | 7017 | 7073 | 7129                  | 7185 | 7242 | 9 51.3 |
| 22    | 7298          | 7354 | 7410 | 7467  | 7523        | 7579 | 7635 | 7692                  | 7748 | 7804 |        |
| 23    | 7860          | 7917 | 7973 | 8029  | 8085        | 8142 | 8198 | 8254                  | 8310 | 8366 |        |
| 24    | 8423          | 8479 | 8535 | 8591  | 8648        | 8704 | 8760 | 8816                  | 8872 | 8929 |        |
| 25    | 8985          | 9041 | 9097 | 9154  | 9210        | 9266 | 9322 | 9378                  | 9435 | 9491 |        |
| 26    | 9547          | 9603 | 9659 | 9716  | 9772        | 9828 | 9884 | 9941                  | 9997 | 0053 |        |
| 27    | 888 0109      | 0165 | 0222 | 0278  | 0334        | 0390 | 0446 | 0503                  | 0559 | 0615 |        |
| 28    | 0671          | 0727 | 0784 | 0840  | 0896        | 0952 | 1008 | 1064                  | 1121 | 1177 |        |
| 29    | 1233          | 1289 | 1345 | 1402  | 1458        | 1514 | 1570 | 1626                  | 1683 | 1739 |        |
| 7730  | 888 1795      | 1851 | 1907 | 1963  | 2020        | 2076 | 2132 | 2188                  | 2244 | 2301 |        |
| 31    | 2357          | 2413 | 2469 | 2525  | 2581        | 2638 | 2694 | 2750                  | 2806 | 2862 |        |
| 32    | 2918          | 2975 | 3031 | 3087  | 3143        | 3199 | 3255 | 3312                  | 3368 | 3424 | 58     |
| 33    | 3480          | 3536 | 3592 | 3649  | 3705        | 3761 | 3817 | 3873                  | 3929 | 3986 | 1 5.6  |
| 34    | 4042          | 4098 | 4154 | 4210  | 4266        | 4322 | 4379 | 4435                  | 4491 | 4547 | 2 11.2 |
| 35    | 4603          | 4659 | 4715 | 4772  | 4828        | 4884 | 4940 | 4996                  | 5052 | 5108 | 3 16.8 |
| 36    | 5165          | 5221 | 5277 | 5333  | 5389        | 5445 | 5501 | 5558                  | 5614 | 5670 | 4 22.4 |
| 37    | 5726          | 5782 | 5838 | 5894  | 5950        | 6007 | 6063 | 6119                  | 6175 | 6231 | 5 28.0 |
| 38    | 6287          | 6343 | 6400 | 6456  | 6512        | 6568 | 6624 | 6680                  | 6736 | 6792 | 6 33.6 |
| 39    | 6848          | 6905 | 6961 | 7017  | 7073        | 7129 | 7185 | 7241                  | 7297 | 7353 | 7 39.2 |
| 7740  | 888 7410      | 7466 | 7522 | 7578  | 7634        | 7690 | 7746 | 7802                  | 7858 | 7915 | 8 44.8 |
| 41    | 7971          | 8027 | 8083 | 8139  | 8195        | 8251 | 8307 | 8363                  | 8419 | 8476 | 9 50.4 |
| 42    | 8532          | 8588 | 8644 | 8700  | 8756        | 8812 | 8868 | 8924                  | 8980 | 9037 |        |
| 43    | 9093          | 9149 | 9205 | 9261  | 9317        | 9373 | 9429 | 9485                  | 9541 | 9597 |        |
| 44    | 9653          | 9710 | 9766 | 9822  | 9878        | 9934 | 9990 | 0046                  | 0102 | 0158 |        |
| 45    | 889 0214      | 0270 | 0326 | 0382  | 0439        | 0495 | 0551 | 0607                  | 0663 | 0719 |        |
| 46    | 0775          | 0831 | 0887 | 0943  | 0999        | 1055 | 1111 | 1167                  | 1223 | 1279 |        |
| 47    | 1336          | 1392 | 1448 | 1504  | 1560        | 1616 | 1672 | 1728                  | 1784 | 1840 |        |
| 48    | 1896          | 1952 | 2008 | 2064  | 2120        | 2176 | 2232 | 2288                  | 2345 | 2401 |        |
| 49    | 2457          | 2513 | 2569 | 2625  | 2681        | 2737 | 2793 | 2849                  | 2905 | 2961 |        |
| 7750  | 889 3017      | 3073 | 3129 | 3185  | 3241        | 3297 | 3353 | 3409                  | 3465 | 3521 |        |
| N.    | 0             | 1    | 2    | 3     | 4           | 5    | 6    | 7                     | 8    | 9    | P. P.  |
| 77000 | = 21° 23' 20" |      |      | 77000 | = 2° 8' 20" |      |      | S. 4.685 4740 T. 7767 |      |      |        |
| 77100 | = 21 25 0     |      |      | 77100 | = 2 8 30    |      |      | 4737 7772             |      |      |        |
| 77200 | = 21 26 40    |      |      | 77200 | = 2 8 40    |      |      | 4735 7777             |      |      |        |
| 77300 | = 21 28 20    |      |      | 77300 | = 2 8 50    |      |      | 4732 7782             |      |      |        |
| 77400 | = 21 30 0     |      |      | 77400 | = 2 9 0     |      |      | 4729 7788             |      |      |        |



| N.    | 0           | 1    | 2    | 3    | 4     | 5     | 6         | 7        | 8     | 9       | P. P. |
|-------|-------------|------|------|------|-------|-------|-----------|----------|-------|---------|-------|
| 7750  | 889 3017    | 3073 | 3129 | 3185 | 3241  | 3297  | 3353      | 3409     | 3465  | 3521    |       |
| 51    | 3577        | 3633 | 3689 | 3745 | 3801  | 3858  | 3914      | 3970     | 4026  | 4082    |       |
| 52    | 4138        | 4194 | 4250 | 4306 | 4362  | 4418  | 4474      | 4530     | 4586  | 4642    |       |
| 53    | 4698        | 4754 | 4810 | 4866 | 4922  | 4978  | 5034      | 5090     | 5146  | 5202    |       |
| 54    | 5258        | 5314 | 5370 | 5426 | 5482  | 5538  | 5594      | 5650     | 5706  | 5762    |       |
| 55    | 5818        | 5874 | 5930 | 5986 | 6042  | 6098  | 6154      | 6210     | 6266  | 6322    |       |
| 56    | 6378        | 6434 | 6490 | 6546 | 6602  | 6658  | 6714      | 6770     | 6826  | 6882    |       |
| 57    | 6938        | 6994 | 7050 | 7106 | 7162  | 7218  | 7274      | 7330     | 7386  | 7442    |       |
| 58    | 7498        | 7554 | 7610 | 7666 | 7722  | 7778  | 7834      | 7890     | 7946  | 8002    |       |
| 59    | 8058        | 8113 | 8169 | 8225 | 8281  | 8337  | 8393      | 8449     | 8505  | 8561    |       |
| 7760  | 889 8617    | 8673 | 8729 | 8785 | 8841  | 8897  | 8953      | 9009     | 9065  | 9121    |       |
| 61    | 9177        | 9233 | 9289 | 9345 | 9401  | 9457  | 9513      | 9569     | 9624  | 9680    | 56    |
| 62    | 9736        | 9792 | 9848 | 9904 | 9960  | 10016 | 10072     | 10128    | 10184 | 10240   | 56    |
| 63    | 890 0296    | 0352 | 0408 | 0464 | 0520  | 0576  | 0632      | 0687     | 0743  | 0799    | 11.2  |
| 64    | 0855        | 0911 | 0967 | 1023 | 1079  | 1135  | 1191      | 1247     | 1303  | 1359    | 16.8  |
| 65    | 1415        | 1471 | 1526 | 1582 | 1638  | 1694  | 1750      | 1806     | 1862  | 1918    | 22.4  |
| 66    | 1974        | 2030 | 2086 | 2142 | 2198  | 2253  | 2309      | 2365     | 2421  | 2477    | 28.0  |
| 67    | 2533        | 2589 | 2645 | 2701 | 2757  | 2813  | 2869      | 2924     | 2980  | 3036    | 33.6  |
| 68    | 3092        | 3148 | 3204 | 3260 | 3316  | 3372  | 3428      | 3484     | 3539  | 3595    | 39.2  |
| 69    | 3651        | 3707 | 3763 | 3819 | 3875  | 3931  | 3987      | 4043     | 4098  | 4154    | 44.8  |
| 7770  | 890 4210    | 4266 | 4322 | 4378 | 4434  | 4490  | 4546      | 4601     | 4657  | 4713    | 50.4  |
| 71    | 4769        | 4825 | 4881 | 4937 | 4993  | 5049  | 5104      | 5160     | 5216  | 5272    |       |
| 72    | 5328        | 5384 | 5440 | 5496 | 5551  | 5607  | 5663      | 5719     | 5775  | 5831    |       |
| 73    | 5887        | 5943 | 5998 | 6054 | 6110  | 6166  | 6222      | 6278     | 6334  | 6389    |       |
| 74    | 6445        | 6501 | 6557 | 6613 | 6669  | 6725  | 6781      | 6836     | 6892  | 6948    |       |
| 75    | 7004        | 7060 | 7116 | 7172 | 7227  | 7283  | 7339      | 7395     | 7451  | 7507    |       |
| 76    | 7563        | 7618 | 7674 | 7730 | 7786  | 7842  | 7898      | 7953     | 8009  | 8065    |       |
| 77    | 8121        | 8177 | 8233 | 8289 | 8344  | 8400  | 8456      | 8512     | 8568  | 8624    |       |
| 78    | 8679        | 8735 | 8791 | 8847 | 8903  | 8959  | 9014      | 9070     | 9126  | 9182    |       |
| 79    | 9238        | 9294 | 9349 | 9405 | 9461  | 9517  | 9573      | 9629     | 9684  | 9740    |       |
| 7780  | 890 9796    | 9852 | 9908 | 9963 | 10019 | 10075 | 10131     | 10187    | 10243 | 10298   |       |
| 81    | 891 0354    | 0410 | 0466 | 0522 | 0577  | 0633  | 0689      | 0745     | 0801  | 0856    | 55    |
| 82    | 0912        | 0968 | 1024 | 1080 | 1135  | 1191  | 1247      | 1303     | 1359  | 1415    | 5.5   |
| 83    | 1470        | 1526 | 1582 | 1638 | 1694  | 1749  | 1805      | 1861     | 1917  | 1972    | 11.0  |
| 84    | 2028        | 2084 | 2140 | 2196 | 2251  | 2307  | 2363      | 2419     | 2475  | 2530    | 16.5  |
| 85    | 2586        | 2642 | 2698 | 2754 | 2809  | 2865  | 2921      | 2977     | 3032  | 3088    | 22.0  |
| 86    | 3144        | 3200 | 3256 | 3311 | 3367  | 3423  | 3479      | 3534     | 3590  | 3646    | 27.5  |
| 87    | 3702        | 3758 | 3813 | 3869 | 3925  | 3981  | 4036      | 4092     | 4148  | 4204    | 33.0  |
| 88    | 4259        | 4315 | 4371 | 4427 | 4482  | 4538  | 4594      | 4650     | 4706  | 4761    | 38.5  |
| 89    | 4817        | 4873 | 4929 | 4984 | 5040  | 5096  | 5152      | 5207     | 5263  | 5319    | 44.0  |
| 7790  | 891 5375    | 5430 | 5486 | 5542 | 5598  | 5653  | 5709      | 5765     | 5821  | 5876    | 49.5  |
| 91    | 5932        | 5988 | 6044 | 6099 | 6155  | 6211  | 6266      | 6322     | 6378  | 6434    |       |
| 92    | 6489        | 6545 | 6601 | 6657 | 6712  | 6768  | 6824      | 6880     | 6935  | 6991    |       |
| 93    | 7047        | 7102 | 7158 | 7214 | 7270  | 7325  | 7381      | 7437     | 7493  | 7548    |       |
| 94    | 7604        | 7660 | 7715 | 7771 | 7827  | 7883  | 7938      | 7994     | 8050  | 8105    |       |
| 95    | 8161        | 8217 | 8273 | 8328 | 8384  | 8440  | 8495      | 8551     | 8607  | 8663    |       |
| 96    | 8718        | 8774 | 8830 | 8885 | 8941  | 8997  | 9053      | 9108     | 9164  | 9220    |       |
| 97    | 9275        | 9331 | 9387 | 9442 | 9498  | 9554  | 9610      | 9665     | 9721  | 9777    |       |
| 98    | 9832        | 9888 | 9944 | 9999 | 10055 | 10111 | 10166     | 10222    | 10278 | 10334   |       |
| 99    | 892 0389    | 0445 | 0501 | 0556 | 0612  | 0668  | 0723      | 0779     | 0835  | 0890    |       |
| 7800  | 892 0946    | 1002 | 1057 | 1113 | 1169  | 1224  | 1280      | 1336     | 1391  | 1447    |       |
| N.    | 0           | 1    | 2    | 3    | 4     | 5     | 6         | 7        | 8     | 9       | P. P. |
| 7750° | 21° 31' 40" |      |      |      |       | 7750° | 2° 9' 10" | S. 4.685 | 4727  | T. 7793 |       |
| 7760° | 21° 33' 20" |      |      |      |       | 7760° | 2° 9' 20" |          | 4724  | 7798    |       |
| 7770° | 21° 35' 0"  |      |      |      |       | 7770° | 2° 9' 30" |          | 4721  | 7804    |       |
| 7780° | 21° 36' 40" |      |      |      |       | 7780° | 2° 9' 40" |          | 4719  | 7809    |       |
| 7790° | 21° 38' 20" |      |      |      |       | 7790° | 2° 9' 50" |          | 4716  | 7814    |       |



| N.   | 0        | 1    | 2    | 3     | 4     | 5     | 6     | 7     | 8     | 9     | P. P. |
|------|----------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|
| 7800 | 892 0916 | 1002 | 1057 | 1113  | 1169  | 1224  | 1280  | 1335  | 1391  | 1447  |       |
| 01   | 1503     | 1558 | 1614 | 1670  | 1725  | 1781  | 1837  | 1893  | 1949  | 2005  |       |
| 02   | 2059     | 2115 | 2171 | 2226  | 2282  | 2338  | 2394  | 2450  | 2506  | 2562  |       |
| 03   | 2616     | 2672 | 2727 | 2783  | 2839  | 2895  | 2951  | 3007  | 3063  | 3119  |       |
| 04   | 3173     | 3228 | 3284 | 3340  | 3395  | 3451  | 3507  | 3563  | 3619  | 3675  |       |
| 05   | 3729     | 3785 | 3840 | 3896  | 3951  | 4007  | 4063  | 4119  | 4175  | 4231  |       |
| 06   | 4285     | 4341 | 4397 | 4453  | 4508  | 4564  | 4620  | 4676  | 4732  | 4788  |       |
| 07   | 4842     | 4897 | 4953 | 5009  | 5064  | 5120  | 5176  | 5232  | 5288  | 5344  |       |
| 08   | 5398     | 5454 | 5509 | 5565  | 5621  | 5677  | 5733  | 5789  | 5845  | 5901  |       |
| 09   | 5954     | 6010 | 6065 | 6121  | 6177  | 6233  | 6289  | 6345  | 6401  | 6457  |       |
| 7810 | 892 6510 | 6566 | 6622 | 6677  | 6733  | 6789  | 6845  | 6901  | 6957  | 7013  |       |
| 11   | 7066     | 7122 | 7178 | 7234  | 7290  | 7346  | 7402  | 7458  | 7514  | 7570  |       |
| 12   | 7622     | 7678 | 7734 | 7790  | 7846  | 7902  | 7958  | 8014  | 8070  | 8126  |       |
| 13   | 8178     | 8234 | 8290 | 8346  | 8402  | 8458  | 8514  | 8570  | 8626  | 8682  |       |
| 14   | 8734     | 8790 | 8846 | 8902  | 8958  | 9014  | 9070  | 9126  | 9182  | 9238  |       |
| 15   | 9290     | 9345 | 9401 | 9457  | 9513  | 9569  | 9625  | 9681  | 9737  | 9793  |       |
| 16   | 9846     | 9901 | 9957 | 10013 | 10069 | 10125 | 10181 | 10237 | 10293 | 10349 |       |
| 17   | 893 0401 | 0457 | 0513 | 0568  | 0624  | 0680  | 0736  | 0792  | 0848  | 0904  |       |
| 18   | 0957     | 1012 | 1068 | 1124  | 1179  | 1235  | 1291  | 1347  | 1403  | 1459  |       |
| 19   | 1512     | 1568 | 1624 | 1679  | 1735  | 1791  | 1847  | 1903  | 1959  | 2015  |       |
| 7820 | 893 2068 | 2123 | 2179 | 2234  | 2290  | 2346  | 2402  | 2458  | 2514  | 2570  |       |
| 21   | 2623     | 2678 | 2734 | 2790  | 2846  | 2902  | 2958  | 3014  | 3070  | 3126  |       |
| 22   | 3178     | 3234 | 3290 | 3346  | 3402  | 3458  | 3514  | 3570  | 3626  | 3682  |       |
| 23   | 3733     | 3789 | 3844 | 3900  | 3956  | 4012  | 4068  | 4124  | 4180  | 4236  |       |
| 24   | 4288     | 4344 | 4399 | 4455  | 4511  | 4567  | 4623  | 4679  | 4735  | 4791  |       |
| 25   | 4843     | 4899 | 4954 | 5010  | 5066  | 5122  | 5178  | 5234  | 5290  | 5346  |       |
| 26   | 5398     | 5454 | 5509 | 5565  | 5621  | 5677  | 5733  | 5789  | 5845  | 5901  |       |
| 27   | 5953     | 6009 | 6064 | 6120  | 6176  | 6232  | 6288  | 6344  | 6400  | 6456  |       |
| 28   | 6508     | 6564 | 6619 | 6675  | 6731  | 6787  | 6843  | 6899  | 6955  | 7011  |       |
| 29   | 7063     | 7118 | 7174 | 7230  | 7286  | 7342  | 7398  | 7454  | 7510  | 7566  |       |
| 7830 | 893 7618 | 7671 | 7729 | 7784  | 7840  | 7896  | 7952  | 8008  | 8064  | 8120  |       |
| 31   | 8172     | 8228 | 8284 | 8339  | 8395  | 8451  | 8507  | 8563  | 8619  | 8675  |       |
| 32   | 8727     | 8782 | 8838 | 8894  | 8949  | 9005  | 9061  | 9117  | 9173  | 9229  |       |
| 33   | 9281     | 9337 | 9392 | 9448  | 9504  | 9560  | 9616  | 9672  | 9728  | 9784  |       |
| 34   | 9836     | 9891 | 9947 | 10002 | 10058 | 10114 | 10170 | 10226 | 10282 | 10338 |       |
| 35   | 894 0390 | 0445 | 0501 | 0556  | 0612  | 0668  | 0724  | 0780  | 0836  | 0892  |       |
| 36   | 0944     | 1000 | 1055 | 1111  | 1166  | 1222  | 1278  | 1334  | 1390  | 1446  |       |



| N.          | 0             | 1    | 2    | 3    | 4     | 5            | 6    | 7        | 8    | 9       | P. P.  |
|-------------|---------------|------|------|------|-------|--------------|------|----------|------|---------|--------|
| <b>7850</b> | 894 8697      | 8752 | 8807 | 8863 | 8918  | 8973         | 9028 | 9084     | 9139 | 9194    |        |
| 51          | 9250          | 9305 | 9360 | 9416 | 9471  | 9526         | 9582 | 9637     | 9692 | 9748    |        |
| 52          | 9803          | 9858 | 9914 | 9969 | 0024  | 0079         | 0135 | 0190     | 0245 | 0301    |        |
| 53          | 895 0356      | 0411 | 0467 | 0522 | 0577  | 0632         | 0688 | 0743     | 0798 | 0854    |        |
| 54          | 0909          | 0964 | 1020 | 1075 | 1130  | 1185         | 1241 | 1296     | 1351 | 1407    |        |
| 55          | 1462          | 1517 | 1572 | 1628 | 1683  | 1738         | 1794 | 1849     | 1904 | 1959    |        |
| 56          | 2015          | 2070 | 2125 | 2181 | 2236  | 2291         | 2346 | 2402     | 2457 | 2512    |        |
| 57          | 2568          | 2623 | 2678 | 2733 | 2789  | 2844         | 2899 | 2954     | 3010 | 3065    |        |
| 58          | 3120          | 3176 | 3231 | 3286 | 3341  | 3397         | 3452 | 3507     | 3562 | 3618    |        |
| 59          | 3673          | 3728 | 3783 | 3839 | 3894  | 3949         | 4004 | 4060     | 4115 | 4170    |        |
| <b>7860</b> | 895 4225      | 4281 | 4336 | 4391 | 4446  | 4502         | 4557 | 4612     | 4667 | 4723    |        |
| 61          | 4778          | 4833 | 4888 | 4944 | 4999  | 5054         | 5109 | 5165     | 5220 | 5275    | 56     |
| 62          | 5330          | 5386 | 5441 | 5496 | 5551  | 5607         | 5662 | 5717     | 5772 | 5828    | 1 5.6  |
| 63          | 5883          | 5938 | 5993 | 6048 | 6104  | 6159         | 6214 | 6269     | 6325 | 6380    | 2 11.2 |
| 64          | 6435          | 6490 | 6545 | 6601 | 6656  | 6711         | 6766 | 6822     | 6877 | 6932    | 3 16.8 |
| 65          | 6987          | 7042 | 7098 | 7153 | 7208  | 7263         | 7319 | 7374     | 7429 | 7484    | 4 22.4 |
| 66          | 7539          | 7595 | 7650 | 7705 | 7760  | 7815         | 7871 | 7926     | 7981 | 8036    | 5 28.0 |
| 67          | 8092          | 8147 | 8202 | 8257 | 8312  | 8368         | 8423 | 8478     | 8533 | 8588    | 6 33.6 |
| 68          | 8644          | 8699 | 8754 | 8809 | 8864  | 8919         | 8975 | 9030     | 9085 | 9140    | 7 39.2 |
| 69          | 9195          | 9251 | 9306 | 9361 | 9416  | 9471         | 9527 | 9582     | 9637 | 9692    | 8 44.8 |
| <b>7870</b> | 895 9747      | 9803 | 9858 | 9913 | 9968  | 0023         | 0078 | 0134     | 0189 | 0244    | 9 50.4 |
| 71          | 896 0299      | 0354 | 0409 | 0465 | 0520  | 0575         | 0630 | 0685     | 0741 | 0796    |        |
| 72          | 0851          | 0906 | 0961 | 1016 | 1072  | 1127         | 1182 | 1237     | 1292 | 1347    |        |
| 73          | 1403          | 1458 | 1513 | 1568 | 1623  | 1678         | 1733 | 1789     | 1844 | 1899    |        |
| 74          | 1954          | 2009 | 2064 | 2120 | 2175  | 2230         | 2285 | 2340     | 2395 | 2450    |        |
| 75          | 2506          | 2561 | 2616 | 2671 | 2726  | 2781         | 2837 | 2892     | 2947 | 3002    |        |
| 76          | 3057          | 3112 | 3167 | 3222 | 3278  | 3333         | 3388 | 3443     | 3498 | 3553    |        |
| 77          | 3608          | 3664 | 3719 | 3774 | 3829  | 3884         | 3939 | 3994     | 4050 | 4105    |        |
| 78          | 4160          | 4215 | 4270 | 4325 | 4380  | 4435         | 4491 | 4546     | 4601 | 4656    |        |
| 79          | 4711          | 4766 | 4821 | 4876 | 4931  | 4987         | 5042 | 5097     | 5152 | 5207    |        |
| <b>7880</b> | 896 5262      | 5317 | 5372 | 5428 | 5483  | 5538         | 5593 | 5648     | 5703 | 5758    |        |
| 81          | 5813          | 5868 | 5923 | 5979 | 6034  | 6089         | 6144 | 6199     | 6254 | 6309    | 55     |
| 82          | 6364          | 6419 | 6475 | 6530 | 6585  | 6640         | 6695 | 6750     | 6805 | 6860    | 1 5.5  |
| 83          | 6915          | 6970 | 7025 | 7081 | 7136  | 7191         | 7246 | 7301     | 7356 | 7411    | 2 11.0 |
| 84          | 7466          | 7521 | 7576 | 7631 | 7686  | 7742         | 7797 | 7852     | 7907 | 7962    | 3 16.5 |
| 85          | 8017          | 8072 | 8127 | 8182 | 8237  | 8292         | 8347 | 8403     | 8458 | 8513    | 4 22.0 |
| 86          | 8568          | 8623 | 8678 | 8733 | 8788  | 8843         | 8898 | 8953     | 9008 | 9063    | 5 27.5 |
| 87          | 9118          | 9173 | 9229 | 9284 | 9339  | 9394         | 9449 | 9504     | 9559 | 9614    | 6 33.0 |
| 88          | 9669          | 9724 | 9779 | 9834 | 9889  | 9944         | 9999 | 0054     | 0109 | 0165    | 7 38.5 |
| 89          | 897 0220      | 0275 | 0330 | 0385 | 0440  | 0495         | 0550 | 0605     | 0660 | 0715    | 8 44.0 |
| <b>7890</b> | 897 0770      | 0825 | 0880 | 0935 | 0990  | 1045         | 1100 | 1155     | 1210 | 1265    | 9 49.5 |
| 91          | 1320          | 1375 | 1431 | 1486 | 1541  | 1596         | 1651 | 1706     | 1761 | 1816    |        |
| 92          | 1871          | 1926 | 1981 | 2036 | 2091  | 2146         | 2201 | 2256     | 2311 | 2366    |        |
| 93          | 2421          | 2476 | 2531 | 2586 | 2641  | 2696         | 2751 | 2806     | 2861 | 2916    |        |
| 94          | 2971          | 3026 | 3081 | 3136 | 3191  | 3246         | 3301 | 3356     | 3411 | 3466    |        |
| 95          | 3521          | 3576 | 3631 | 3686 | 3741  | 3796         | 3851 | 3906     | 3961 | 4016    |        |
| 96          | 4071          | 4126 | 4181 | 4236 | 4291  | 4346         | 4401 | 4456     | 4511 | 4566    |        |
| 97          | 4621          | 4676 | 4731 | 4786 | 4841  | 4896         | 4951 | 5006     | 5061 | 5116    |        |
| 98          | 5171          | 5226 | 5281 | 5336 | 5391  | 5446         | 5501 | 5556     | 5611 | 5666    |        |
| 99          | 5721          | 5776 | 5831 | 5886 | 5941  | 5996         | 6051 | 6106     | 6161 | 6216    |        |
| <b>7900</b> | 897 6271      | 6326 | 6381 | 6436 | 6491  | 6546         | 6601 | 6656     | 6711 | 6766    |        |
| N.          | 0             | 1    | 2    | 3    | 4     | 5            | 6    | 7        | 8    | 9       | P. P.  |
| 7850'       | = 21° 48' 20" |      |      |      | 7850' | = 2° 10' 50" |      | S. 4.685 | 4700 | T. 7846 |        |
| 7860'       | = 21 50 0     |      |      |      | 7860' | = 2 11 0     |      |          | 4698 | 7852    |        |
| 7870'       | = 21 51 40    |      |      |      | 7870' | = 2 11 10    |      |          | 4695 | 7857    |        |
| 7880'       | = 21 53 20    |      |      |      | 7880' | = 2 11 20    |      |          | 4692 | 7862    |        |
| 7890'       | = 21 55 0     |      |      |      | 7890' | = 2 11 30    |      |          | 4690 | 7868    |        |



| N.    | 0           | 1     | 2     | 3     | 4     | 5           | 6     | 7     | 8     | 9     | P. P. |
|-------|-------------|-------|-------|-------|-------|-------------|-------|-------|-------|-------|-------|
| 7900  | 897 6271    | 6326  | 6381  | 6436  | 6491  | 6546        | 6601  | 6656  | 6711  | 6766  |       |
| 01    | 6821        | 6876  | 6931  | 6986  | 7041  | 7096        | 7151  | 7206  | 7261  | 7316  |       |
| 02    | 7370        | 7425  | 7480  | 7535  | 7590  | 7645        | 7700  | 7755  | 7810  | 7865  |       |
| 03    | 7920        | 7975  | 8030  | 8085  | 8140  | 8195        | 8250  | 8305  | 8360  | 8415  |       |
| 04    | 8469        | 8524  | 8579  | 8634  | 8689  | 8744        | 8799  | 8854  | 8909  | 8964  |       |
| 05    | 9019        | 9074  | 9129  | 9184  | 9239  | 9294        | 9349  | 9404  | 9459  | 9514  |       |
| 06    | 9568        | 9623  | 9678  | 9733  | 9788  | 9843        | 9898  | 9953  | 10008 | 10063 |       |
| 07    | 898 0117    | 0172  | 0227  | 0282  | 0337  | 0392        | 0447  | 0502  | 0557  | 0612  |       |
| 08    | 0667        | 0722  | 0777  | 0832  | 0887  | 0942        | 0997  | 1052  | 1107  | 1162  |       |
| 09    | 1216        | 1271  | 1326  | 1381  | 1436  | 1491        | 1546  | 1601  | 1656  | 1711  |       |
| 7910  | 898 1765    | 1820  | 1875  | 1930  | 1985  | 2040        | 2095  | 2150  | 2205  | 2260  |       |
| 11    | 2314        | 2369  | 2424  | 2479  | 2534  | 2589        | 2644  | 2699  | 2754  | 2809  | 55    |
| 12    | 2863        | 2918  | 2973  | 3028  | 3083  | 3138        | 3193  | 3248  | 3303  | 3358  | 5.5   |
| 13    | 3412        | 3467  | 3522  | 3577  | 3632  | 3687        | 3742  | 3797  | 3852  | 3907  | 11.0  |
| 14    | 3960        | 4015  | 4070  | 4125  | 4180  | 4235        | 4290  | 4345  | 4400  | 4455  | 16.5  |
| 15    | 4509        | 4564  | 4619  | 4674  | 4729  | 4784        | 4839  | 4894  | 4949  | 5004  | 22.0  |
| 16    | 5058        | 5113  | 5168  | 5223  | 5278  | 5333        | 5388  | 5443  | 5498  | 5553  | 27.5  |
| 17    | 5606        | 5661  | 5716  | 5771  | 5826  | 5881        | 5936  | 5991  | 6046  | 6101  | 33.0  |
| 18    | 6155        | 6210  | 6265  | 6320  | 6375  | 6430        | 6485  | 6540  | 6595  | 6650  | 38.5  |
| 19    | 6703        | 6758  | 6813  | 6868  | 6923  | 6978        | 7033  | 7088  | 7143  | 7198  | 44.0  |
| 7920  | 898 7252    | 7307  | 7362  | 7417  | 7472  | 7527        | 7582  | 7637  | 7692  | 7747  | 49.5  |
| 21    | 7801        | 7856  | 7911  | 7966  | 8021  | 8076        | 8131  | 8186  | 8241  | 8296  |       |
| 22    | 8348        | 8403  | 8458  | 8513  | 8568  | 8623        | 8678  | 8733  | 8788  | 8843  |       |
| 23    | 8897        | 8952  | 9007  | 9062  | 9117  | 9172        | 9227  | 9282  | 9337  | 9392  |       |
| 24    | 9445        | 9499  | 9554  | 9609  | 9664  | 9719        | 9774  | 9829  | 9884  | 9939  |       |
| 25    | 9993        | 10048 | 10103 | 10158 | 10213 | 10268       | 10323 | 10378 | 10433 | 10488 |       |
| 26    | 899 0541    | 0595  | 0650  | 0705  | 0760  | 0815        | 0870  | 0925  | 0980  | 1035  |       |
| 27    | 1089        | 1143  | 1198  | 1253  | 1308  | 1363        | 1418  | 1473  | 1528  | 1583  |       |
| 28    | 1636        | 1691  | 1746  | 1801  | 1856  | 1911        | 1966  | 2021  | 2076  | 2131  |       |
| 29    | 2184        | 2239  | 2294  | 2348  | 2403  | 2458        | 2513  | 2568  | 2623  | 2678  |       |
| 7930  | 899 2732    | 2787  | 2842  | 2896  | 2951  | 3006        | 3061  | 3116  | 3171  | 3226  |       |
| 31    | 3279        | 3334  | 3389  | 3444  | 3499  | 3554        | 3609  | 3664  | 3719  | 3774  | 51    |
| 32    | 3827        | 3882  | 3937  | 3992  | 4047  | 4102        | 4157  | 4212  | 4267  | 4322  | 5.4   |
| 33    | 4375        | 4429  | 4484  | 4539  | 4594  | 4649        | 4704  | 4759  | 4814  | 4869  | 10.8  |
| 34    | 4922        | 4977  | 5032  | 5087  | 5142  | 5197        | 5252  | 5307  | 5362  | 5417  | 16.2  |
| 35    | 5469        | 5524  | 5579  | 5634  | 5689  | 5744        | 5799  | 5854  | 5909  | 5964  | 21.6  |
| 36    | 6017        | 6072  | 6127  | 6182  | 6237  | 6292        | 6347  | 6402  | 6457  | 6512  | 27.0  |
| 37    | 6564        | 6619  | 6674  | 6729  | 6784  | 6839        | 6894  | 6949  | 7004  | 7059  | 32.4  |
| 38    | 7111        | 7166  | 7221  | 7276  | 7331  | 7386        | 7441  | 7496  | 7551  | 7606  | 37.8  |
| 39    | 7658        | 7713  | 7767  | 7822  | 7877  | 7932        | 7987  | 8042  | 8097  | 8152  | 43.2  |
| 7940  | 899 8205    | 8260  | 8315  | 8369  | 8424  | 8479        | 8534  | 8589  | 8644  | 8699  |       |
| 41    | 8752        | 8807  | 8862  | 8916  | 8971  | 9026        | 9081  | 9136  | 9191  | 9246  |       |
| 42    | 9299        | 9354  | 9408  | 9463  | 9518  | 9573        | 9628  | 9683  | 9738  | 9793  |       |
| 43    | 9846        | 9900  | 9955  | 10010 | 10065 | 10120       | 10175 | 10230 | 10285 | 10340 |       |
| 44    | 900 0392    | 0447  | 0502  | 0556  | 0611  | 0666        | 0721  | 0776  | 0831  | 0886  |       |
| 45    | 0939        | 0994  | 1048  | 1103  | 1158  | 1213        | 1268  | 1323  | 1378  | 1433  |       |
| 46    | 1486        | 1540  | 1595  | 1650  | 1704  | 1759        | 1814  | 1869  | 1924  | 1979  |       |
| 47    | 2032        | 2087  | 2141  | 2196  | 2251  | 2306        | 2361  | 2416  | 2471  | 2526  |       |
| 48    | 2579        | 2633  | 2688  | 2743  | 2797  | 2852        | 2907  | 2962  | 3017  | 3072  |       |
| 49    | 3125        | 3180  | 3234  | 3289  | 3344  | 3399        | 3454  | 3509  | 3564  | 3619  |       |
| 7950  | 900 3671    | 3726  | 3781  | 3835  | 3890  | 3944        | 3999  | 4054  | 4109  | 4164  |       |
| N.    | 0           | 1     | 2     | 3     | 4     | 5           | 6     | 7     | 8     | 9     | P. P. |
| 79000 | 21° 56' 40" |       |       |       | 79000 | 21° 57' 40" |       |       |       |       |       |
| 79100 | 21 58 10    |       |       |       | 79100 | 21 59 10    |       |       |       |       |       |
| 79200 | 21 0 0      |       |       |       | 79200 | 21 1 0      |       |       |       |       |       |
| 79300 | 21 1 40     |       |       |       | 79300 | 21 2 40     |       |       |       |       |       |
| 79400 | 21 3 10     |       |       |       | 79400 | 21 4 10     |       |       |       |       |       |



| N.                | 0                  | 1                     | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | P. P.  |
|-------------------|--------------------|-----------------------|------|------|------|------|------|------|------|------|--------|
| 7950              | 900 3671           | 3726                  | 3781 | 3835 | 3890 | 3944 | 3999 | 4054 | 4108 | 4163 |        |
| 51                | 4218               | 4272                  | 4327 | 4381 | 4436 | 4491 | 4545 | 4600 | 4654 | 4709 |        |
| 52                | 4764               | 4818                  | 4873 | 4928 | 4982 | 5037 | 5091 | 5146 | 5201 | 5255 |        |
| 53                | 5310               | 5364                  | 5419 | 5474 | 5528 | 5583 | 5637 | 5692 | 5747 | 5801 |        |
| 54                | 5856               | 5910                  | 5965 | 6020 | 6074 | 6129 | 6183 | 6238 | 6293 | 6347 |        |
| 55                | 6402               | 6456                  | 6511 | 6566 | 6620 | 6675 | 6729 | 6784 | 6839 | 6893 |        |
| 56                | 6948               | 7002                  | 7057 | 7112 | 7166 | 7221 | 7275 | 7330 | 7384 | 7439 |        |
| 57                | 7494               | 7548                  | 7603 | 7657 | 7712 | 7766 | 7821 | 7876 | 7930 | 7985 |        |
| 58                | 8039               | 8094                  | 8148 | 8203 | 8258 | 8312 | 8367 | 8421 | 8476 | 8530 |        |
| 59                | 8585               | 8640                  | 8694 | 8749 | 8803 | 8858 | 8912 | 8967 | 9022 | 9076 |        |
| 7960              | 900 9131           | 9185                  | 9240 | 9294 | 9349 | 9403 | 9458 | 9513 | 9567 | 9622 |        |
| 61                | 9676               | 9731                  | 9785 | 9840 | 9894 | 9949 | 0004 | 0058 | 0113 | 0167 | 55     |
| 62                | 901 0222           | 0276                  | 0331 | 0385 | 0440 | 0494 | 0549 | 0604 | 0658 | 0713 | 1 5.5  |
| 63                | 0767               | 0822                  | 0876 | 0931 | 0985 | 1040 | 1094 | 1149 | 1203 | 1258 | 2 11.0 |
| 64                | 1313               | 1367                  | 1422 | 1476 | 1531 | 1585 | 1640 | 1694 | 1749 | 1803 | 3 16.5 |
| 65                | 1858               | 1912                  | 1967 | 2021 | 2076 | 2130 | 2185 | 2239 | 2294 | 2349 | 4 22.0 |
| 66                | 2403               | 2458                  | 2512 | 2567 | 2621 | 2676 | 2730 | 2785 | 2839 | 2894 | 5 27.5 |
| 67                | 2948               | 3003                  | 3057 | 3112 | 3166 | 3221 | 3275 | 3330 | 3384 | 3439 | 6 33.0 |
| 68                | 3493               | 3548                  | 3602 | 3657 | 3711 | 3766 | 3820 | 3875 | 3929 | 3984 | 7 38.5 |
| 69                | 4038               | 4093                  | 4147 | 4202 | 4256 | 4311 | 4365 | 4420 | 4474 | 4529 | 8 44.0 |
| 7970              | 901 4583           | 4638                  | 4692 | 4747 | 4801 | 4856 | 4910 | 4965 | 5019 | 5074 | 9 49.5 |
| 71                | 5128               | 5183                  | 5237 | 5292 | 5346 | 5401 | 5455 | 5509 | 5564 | 5618 |        |
| 72                | 5673               | 5727                  | 5782 | 5836 | 5891 | 5945 | 6000 | 6054 | 6109 | 6163 |        |
| 73                | 6218               | 6272                  | 6327 | 6381 | 6436 | 6490 | 6544 | 6599 | 6653 | 6708 |        |
| 74                | 6762               | 6817                  | 6871 | 6926 | 6980 | 7035 | 7089 | 7144 | 7198 | 7252 |        |
| 75                | 7307               | 7361                  | 7416 | 7470 | 7525 | 7579 | 7634 | 7688 | 7743 | 7797 |        |
| 76                | 7851               | 7906                  | 7960 | 8015 | 8069 | 8124 | 8178 | 8233 | 8287 | 8341 |        |
| 77                | 8396               | 8450                  | 8505 | 8559 | 8614 | 8668 | 8723 | 8777 | 8831 | 8886 |        |
| 78                | 8940               | 8995                  | 9049 | 9104 | 9158 | 9212 | 9267 | 9321 | 9376 | 9430 |        |
| 79                | 9485               | 9539                  | 9594 | 9648 | 9702 | 9757 | 9811 | 9866 | 9920 | 9974 |        |
| 7980              | 902 0029           | 0083                  | 0138 | 0192 | 0247 | 0301 | 0355 | 0410 | 0464 | 0519 |        |
| 81                | 0573               | 0628                  | 0682 | 0736 | 0791 | 0845 | 0900 | 0954 | 1008 | 1063 | 54     |
| 82                | 1117               | 1172                  | 1226 | 1280 | 1335 | 1389 | 1444 | 1498 | 1552 | 1607 | 1 5.4  |
| 83                | 1661               | 1716                  | 1770 | 1824 | 1879 | 1933 | 1988 | 2042 | 2096 | 2151 | 2 10.8 |
| 84                | 2205               | 2260                  | 2314 | 2368 | 2423 | 2477 | 2532 | 2586 | 2640 | 2695 | 3 16.2 |
| 85                | 2749               | 2804                  | 2858 | 2912 | 2967 | 3021 | 3076 | 3130 | 3184 | 3239 | 4 21.6 |
| 86                | 3293               | 3347                  | 3402 | 3456 | 3511 | 3565 | 3619 | 3674 | 3728 | 3782 | 5 27.0 |
| 87                | 3837               | 3891                  | 3946 | 4000 | 4054 | 4109 | 4163 | 4217 | 4272 | 4326 | 6 32.4 |
| 88                | 4381               | 4435                  | 4489 | 4544 | 4598 | 4652 | 4707 | 4761 | 4815 | 4870 | 7 37.8 |
| 89                | 4924               | 4979                  | 5033 | 5087 | 5142 | 5196 | 5250 | 5305 | 5359 | 5413 | 8 43.2 |
| 7990              | 902 5468           | 5522                  | 5577 | 5631 | 5685 | 5740 | 5794 | 5848 | 5903 | 5957 | 9 48.6 |
| 91                | 6011               | 6066                  | 6120 | 6174 | 6229 | 6283 | 6337 | 6392 | 6446 | 6500 |        |
| 92                | 6555               | 6609                  | 6663 | 6718 | 6772 | 6826 | 6881 | 6935 | 6989 | 7044 |        |
| 93                | 7098               | 7152                  | 7207 | 7261 | 7315 | 7370 | 7424 | 7478 | 7533 | 7587 |        |
| 94                | 7641               | 7696                  | 7750 | 7804 | 7859 | 7913 | 7967 | 8022 | 8076 | 8130 |        |
| 95                | 8185               | 8239                  | 8293 | 8348 | 8402 | 8456 | 8511 | 8565 | 8619 | 8674 |        |
| 96                | 8728               | 8782                  | 8836 | 8891 | 8945 | 8999 | 9054 | 9108 | 9162 | 9217 |        |
| 97                | 9271               | 9325                  | 9380 | 9434 | 9488 | 9542 | 9597 | 9651 | 9705 | 9760 |        |
| 98                | 9814               | 9868                  | 9923 | 9977 | 0031 | 0085 | 0140 | 0194 | 0248 | 0303 |        |
| 99                | 903 0357           | 0411                  | 0466 | 0520 | 0574 | 0628 | 0683 | 0737 | 0791 | 0846 |        |
| 8000              | 903 0900           | 0954                  | 1008 | 1063 | 1117 | 1171 | 1226 | 1280 | 1334 | 1388 |        |
| N.                | 0                  | 1                     | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | P. P.  |
| 7950° = 22° 5' 0" | 7950° = 2° 12' 30" | S. 4.685 4673 T. 7900 |      |      |      |      |      |      |      | 4671 | 7905   |
| 7960° = 22 6 40   | 7960° = 2 12 40    |                       |      |      |      |      |      |      |      | 4668 | 7911   |
| 7970° = 22 8 20   | 7970° = 2 12 50    |                       |      |      |      |      |      |      |      | 4665 | 7916   |
| 7980° = 22 10 0   | 7980° = 2 13 0     |                       |      |      |      |      |      |      |      | 4662 | 7922   |
| 7990° = 22 11 40  | 7990° = 2 13 10    |                       |      |      |      |      |      |      |      |      |        |



| N.    | 0             | 1    | 2    | 3     | 4            | 5     | 6     | 7        | 8     | 9     | P. P.        |
|-------|---------------|------|------|-------|--------------|-------|-------|----------|-------|-------|--------------|
| 8000  | 903 0900      | 0954 | 1008 | 1063  | 1117         | 1171  | 1226  | 1280     | 1334  | 1388  |              |
| 01    | 1443          | 1497 | 1551 | 1606  | 1660         | 1714  | 1768  | 1823     | 1877  | 1931  |              |
| 02    | 1985          | 2040 | 2094 | 2148  | 2203         | 2257  | 2311  | 2365     | 2420  | 2474  |              |
| 03    | 2528          | 2582 | 2637 | 2691  | 2745         | 2799  | 2854  | 2908     | 2962  | 3017  |              |
| 04    | 3071          | 3125 | 3179 | 3234  | 3288         | 3342  | 3396  | 3451     | 3505  | 3559  |              |
| 05    | 3613          | 3668 | 3722 | 3776  | 3830         | 3885  | 3939  | 3993     | 4047  | 4102  |              |
| 06    | 4156          | 4210 | 4264 | 4319  | 4373         | 4427  | 4481  | 4536     | 4590  | 4644  |              |
| 07    | 4698          | 4753 | 4807 | 4861  | 4915         | 4969  | 5024  | 5078     | 5132  | 5186  |              |
| 08    | 5241          | 5295 | 5349 | 5403  | 5458         | 5512  | 5566  | 5620     | 5674  | 5729  |              |
| 09    | 5783          | 5837 | 5891 | 5946  | 6000         | 6054  | 6108  | 6163     | 6217  | 6271  |              |
| 8010  | 903 6325      | 6379 | 6434 | 6488  | 6542         | 6596  | 6650  | 6705     | 6759  | 6813  |              |
| 11    | 6867          | 6922 | 6976 | 7030  | 7084         | 7138  | 7193  | 7247     | 7301  | 7355  | 55           |
| 12    | 7409          | 7464 | 7518 | 7572  | 7626         | 7680  | 7735  | 7789     | 7843  | 7897  | 1 5.5        |
| 13    | 7951          | 8006 | 8060 | 8114  | 8168         | 8222  | 8277  | 8331     | 8385  | 8439  | 2 11.0       |
| 14    | 8493          | 8548 | 8602 | 8656  | 8710         | 8764  | 8819  | 8873     | 8927  | 8981  | 3 16.5       |
| 15    | 9035          | 9089 | 9144 | 9198  | 9252         | 9306  | 9360  | 9415     | 9469  | 9523  | 4 22.0       |
| 16    | 9577          | 9631 | 9685 | 9740  | 9794         | 9848  | 9902  | 9956     | 10010 | 10065 | 5 27.5       |
| 17    | 904 0119      | 0173 | 0227 | 0281  | 0336         | 0390  | 0444  | 0498     | 0552  | 0606  | 6 33.0       |
| 18    | 0661          | 0715 | 0769 | 0823  | 0877         | 0931  | 0985  | 1040     | 1094  | 1148  | 7 38.5       |
| 19    | 1202          | 1256 | 1310 | 1365  | 1419         | 1473  | 1527  | 1581     | 1635  | 1690  | 8 44.0       |
| 8020  | 904 1744      | 1798 | 1852 | 1906  | 1960         | 2014  | 2069  | 2123     | 2177  | 2231  | 9 49.5       |
| 21    | 2285          | 2339 | 2393 | 2448  | 2502         | 2556  | 2610  | 2664     | 2718  | 2772  |              |
| 22    | 2827          | 2881 | 2935 | 2989  | 3043         | 3097  | 3151  | 3206     | 3260  | 3314  |              |
| 23    | 3368          | 3422 | 3476 | 3530  | 3584         | 3639  | 3693  | 3747     | 3801  | 3855  |              |
| 24    | 3909          | 3963 | 4017 | 4072  | 4126         | 4180  | 4234  | 4288     | 4342  | 4396  |              |
| 25    | 4450          | 4505 | 4559 | 4613  | 4667         | 4721  | 4775  | 4829     | 4883  | 4937  |              |
| 26    | 4992          | 5046 | 5100 | 5154  | 5208         | 5262  | 5316  | 5370     | 5424  | 5479  |              |
| 27    | 5533          | 5587 | 5641 | 5695  | 5749         | 5803  | 5857  | 5911     | 5965  | 6020  |              |
| 28    | 6074          | 6128 | 6182 | 6236  | 6290         | 6344  | 6398  | 6452     | 6506  | 6560  |              |
| 29    | 6615          | 6669 | 6723 | 6777  | 6831         | 6885  | 6939  | 6993     | 7047  | 7101  |              |
| 8030  | 904 7155      | 7210 | 7264 | 7318  | 7372         | 7426  | 7480  | 7534     | 7588  | 7642  |              |
| 31    | 7696          | 7750 | 7804 | 7858  | 7913         | 7967  | 8021  | 8075     | 8129  | 8183  | 54           |
| 32    | 8237          | 8291 | 8345 | 8399  | 8453         | 8507  | 8561  | 8615     | 8670  | 8724  | 1 5.4        |
| 33    | 8778          | 8832 | 8886 | 8940  | 8994         | 9048  | 9102  | 9156     | 9210  | 9264  | 2 10.8       |
| 34    | 9318          | 9372 | 9426 | 9480  | 9534         | 9589  | 9643  | 9697     | 9751  | 9805  | 3 16.2       |
| 35    | 9859          | 9913 | 9967 | 10021 | 10075        | 10129 | 10183 | 10237    | 10291 | 10345 | 4 21.6       |
| 36    | 905 0399      | 0453 | 0507 | 0561  | 0615         | 0669  | 0724  | 0778     | 0832  | 0886  | 5 27.0       |
| 37    | 0940          | 0994 | 1048 | 1102  | 1156         | 1210  | 1264  | 1318     | 1372  | 1426  | 6 32.4       |
| 38    | 1480          | 1534 | 1588 | 1642  | 1696         | 1750  | 1804  | 1858     | 1912  | 1966  | 7 37.8       |
| 39    | 2020          | 2074 | 2128 | 2182  | 2236         | 2290  | 2344  | 2398     | 2452  | 2506  | 8 43.2       |
| 8040  | 905 2560      | 2615 | 2669 | 2723  | 2777         | 2831  | 2885  | 2939     | 2993  | 3047  | 9 48.6       |
| 41    | 3101          | 3155 | 3209 | 3263  | 3317         | 3371  | 3425  | 3479     | 3533  | 3587  |              |
| 42    | 3641          | 3695 | 3749 | 3803  | 3857         | 3911  | 3965  | 4019     | 4073  | 4127  |              |
| 43    | 4181          | 4235 | 4289 | 4343  | 4397         | 4451  | 4505  | 4559     | 4613  | 4667  |              |
| 44    | 4721          | 4775 | 4829 | 4883  | 4937         | 4991  | 5045  | 5099     | 5153  | 5207  |              |
| 45    | 5260          | 5314 | 5368 | 5422  | 5476         | 5530  | 5584  | 5638     | 5692  | 5746  |              |
| 46    | 5800          | 5854 | 5908 | 5962  | 6016         | 6070  | 6124  | 6178     | 6232  | 6286  |              |
| 47    | 6340          | 6394 | 6448 | 6502  | 6556         | 6610  | 6664  | 6718     | 6772  | 6826  |              |
| 48    | 6880          | 6934 | 6988 | 7042  | 7096         | 7149  | 7203  | 7257     | 7311  | 7365  |              |
| 49    | 7419          | 7473 | 7527 | 7581  | 7635         | 7689  | 7743  | 7797     | 7851  | 7905  |              |
| 8050  | 905 7959      | 8013 | 8067 | 8121  | 8175         | 8229  | 8282  | 8336     | 8390  | 8444  |              |
| N.    | 0             | 1    | 2    | 3     | 4            | 5     | 6     | 7        | 8     | 9     | P. P.        |
| 8000  | = 22° 13' 20" |      |      | 8000  | = 2° 13' 20" |       |       | S. 4.685 |       |       | 4660 T. 7927 |
| 80100 | = 22 15 0     |      |      | 8010  | = 2 13 30    |       |       |          |       |       | 4657 7933    |
| 80200 | = 22 16 40    |      |      | 8020  | = 2 13 40    |       |       |          |       |       | 4654 7938    |
| 80300 | = 22 18 20    |      |      | 8030  | = 2 13 50    |       |       |          |       |       | 4652 7943    |
| 80400 | = 22 20 0     |      |      | 8040  | = 2 14 0     |       |       |          |       |       | 4649 7949    |



| N.   | 0                    | 1    | 2    | 3    | 4                   | 5    | 6        | 7    | 8       | 9    | P. P.  |
|------|----------------------|------|------|------|---------------------|------|----------|------|---------|------|--------|
| 8050 | 905 7959             | 8013 | 8067 | 8121 | 8175                | 8229 | 8282     | 8336 | 8390    | 8444 |        |
| 51   | 8498                 | 8552 | 8606 | 8660 | 8714                | 8768 | 8822     | 8876 | 8930    | 8984 |        |
| 52   | 9038                 | 9092 | 9146 | 9199 | 9253                | 9307 | 9361     | 9415 | 9469    | 9523 |        |
| 53   | 9577                 | 9631 | 9685 | 9739 | 9793                | 9847 | 9901     | 9954 | 0008    | 0062 |        |
| 54   | 906 0116             | 0170 | 0224 | 0278 | 0332                | 0386 | 0440     | 0494 | 0548    | 0602 |        |
| 55   | 0655                 | 0709 | 0763 | 0817 | 0871                | 0925 | 0979     | 1033 | 1087    | 1141 |        |
| 56   | 1195                 | 1248 | 1302 | 1356 | 1410                | 1464 | 1518     | 1572 | 1626    | 1680 |        |
| 57   | 1734                 | 1788 | 1841 | 1895 | 1949                | 2003 | 2057     | 2111 | 2165    | 2219 |        |
| 58   | 2273                 | 2327 | 2380 | 2434 | 2488                | 2542 | 2596     | 2650 | 2704    | 2758 |        |
| 59   | 2812                 | 2865 | 2919 | 2973 | 3027                | 3081 | 3135     | 3189 | 3243    | 3297 |        |
| 8060 | 906 3350             | 3404 | 3458 | 3512 | 3566                | 3620 | 3674     | 3728 | 3781    | 3835 |        |
| 61   | 3889                 | 3943 | 3997 | 4051 | 4105                | 4159 | 4212     | 4266 | 4320    | 4374 | 54     |
| 62   | 4428                 | 4482 | 4536 | 4590 | 4643                | 4697 | 4751     | 4805 | 4859    | 4913 | 1 5.4  |
| 63   | 4967                 | 5020 | 5074 | 5128 | 5182                | 5236 | 5290     | 5344 | 5397    | 5451 | 2 10.8 |
| 64   | 5505                 | 5559 | 5613 | 5667 | 5721                | 5774 | 5828     | 5882 | 5936    | 5990 | 3 16.2 |
| 65   | 6044                 | 6098 | 6152 | 6205 | 6259                | 6313 | 6367     | 6421 | 6474    | 6528 | 4 21.6 |
| 66   | 6582                 | 6636 | 6690 | 6744 | 6798                | 6851 | 6905     | 6959 | 7013    | 7067 | 5 27.0 |
| 67   | 7121                 | 7174 | 7228 | 7282 | 7336                | 7390 | 7444     | 7497 | 7551    | 7605 | 6 32.4 |
| 68   | 7659                 | 7713 | 7767 | 7820 | 7874                | 7928 | 7982     | 8036 | 8090    | 8143 | 7 37.8 |
| 69   | 8197                 | 8251 | 8305 | 8359 | 8412                | 8466 | 8520     | 8574 | 8628    | 8682 | 8 43.2 |
| 8070 | 906 8735             | 8789 | 8843 | 8897 | 8951                | 9004 | 9058     | 9112 | 9166    | 9220 | 9 48.6 |
| 71   | 9273                 | 9327 | 9381 | 9435 | 9489                | 9543 | 9596     | 9650 | 9704    | 9758 |        |
| 72   | 9812                 | 9865 | 9919 | 9973 | 0027                | 0081 | 0134     | 0188 | 0242    | 0296 |        |
| 73   | 907 0350             | 0403 | 0457 | 0511 | 0565                | 0618 | 0672     | 0726 | 0780    | 0834 |        |
| 74   | 0887                 | 0941 | 0995 | 1049 | 1103                | 1156 | 1210     | 1264 | 1318    | 1372 |        |
| 75   | 1425                 | 1479 | 1533 | 1587 | 1640                | 1694 | 1748     | 1802 | 1856    | 1909 |        |
| 76   | 1963                 | 2017 | 2071 | 2124 | 2178                | 2232 | 2286     | 2340 | 2393    | 2447 |        |
| 77   | 2501                 | 2555 | 2608 | 2662 | 2716                | 2770 | 2823     | 2877 | 2931    | 2985 |        |
| 78   | 3038                 | 3092 | 3146 | 3200 | 3254                | 3307 | 3361     | 3415 | 3469    | 3522 |        |
| 79   | 3576                 | 3630 | 3684 | 3737 | 3791                | 3845 | 3899     | 3952 | 4006    | 4060 |        |
| 8080 | 907 4114             | 4167 | 4221 | 4275 | 4329                | 4382 | 4436     | 4490 | 4544    | 4597 |        |
| 81   | 4651                 | 4705 | 4759 | 4812 | 4866                | 4920 | 4974     | 5027 | 5081    | 5135 | 53     |
| 82   | 5188                 | 5242 | 5296 | 5350 | 5403                | 5457 | 5511     | 5565 | 5618    | 5672 | 1 5.3  |
| 83   | 5726                 | 5780 | 5833 | 5887 | 5941                | 5994 | 6048     | 6102 | 6156    | 6209 | 2 10.6 |
| 84   | 6263                 | 6317 | 6370 | 6424 | 6478                | 6532 | 6585     | 6639 | 6693    | 6747 | 3 15.9 |
| 85   | 6800                 | 6854 | 6908 | 6961 | 7015                | 7069 | 7123     | 7176 | 7230    | 7284 | 4 21.2 |
| 86   | 7337                 | 7391 | 7445 | 7498 | 7552                | 7606 | 7660     | 7713 | 7767    | 7821 | 5 26.5 |
| 87   | 7874                 | 7928 | 7982 | 8036 | 8089                | 8143 | 8197     | 8250 | 8304    | 8358 | 6 31.8 |
| 88   | 8411                 | 8465 | 8519 | 8573 | 8626                | 8680 | 8734     | 8787 | 8841    | 8895 | 7 37.1 |
| 89   | 8948                 | 9002 | 9056 | 9109 | 9163                | 9217 | 9270     | 9324 | 9378    | 9432 | 8 42.4 |
| 8090 | 907 9485             | 9539 | 9593 | 9646 | 9700                | 9754 | 9807     | 9861 | 9915    | 9968 | 9 47.7 |
| 91   | 908 0022             | 0076 | 0129 | 0183 | 0237                | 0290 | 0344     | 0398 | 0451    | 0505 |        |
| 92   | 0559                 | 0612 | 0666 | 0720 | 0773                | 0827 | 0881     | 0934 | 0988    | 1042 |        |
| 93   | 1095                 | 1149 | 1203 | 1256 | 1310                | 1364 | 1417     | 1471 | 1525    | 1578 |        |
| 94   | 1632                 | 1686 | 1739 | 1793 | 1847                | 1900 | 1954     | 2008 | 2061    | 2115 |        |
| 95   | 2169                 | 2222 | 2276 | 2329 | 2383                | 2437 | 2490     | 2544 | 2598    | 2651 |        |
| 96   | 2705                 | 2759 | 2812 | 2866 | 2920                | 2973 | 3027     | 3080 | 3134    | 3188 |        |
| 97   | 3241                 | 3295 | 3349 | 3402 | 3456                | 3510 | 3563     | 3617 | 3670    | 3724 |        |
| 98   | 3778                 | 3831 | 3885 | 3939 | 3992                | 4046 | 4099     | 4153 | 4207    | 4260 |        |
| 99   | 4314                 | 4368 | 4421 | 4475 | 4528                | 4582 | 4636     | 4689 | 4743    | 4797 |        |
| 8100 | 908 4850             | 4904 | 4957 | 5011 | 5065                | 5118 | 5172     | 5225 | 5279    | 5333 |        |
| N.   | 0                    | 1    | 2    | 3    | 4                   | 5    | 6        | 7    | 8       | 9    | P. P.  |
|      | 80500' = 22° 21' 40" |      |      |      | 80500' = 2° 14' 10" |      | S. 4.685 | 4040 | 1. 7954 |      |        |
|      | 80600' = 22 23 20    |      |      |      | 80600' = 2 14 20    |      |          | 4643 | 7960    |      |        |
|      | 80700' = 22 25 0     |      |      |      | 80700' = 2 14 30    |      |          | 4641 | 7965    |      |        |
|      | 80800' = 22 26 40    |      |      |      | 80800' = 2 14 40    |      |          | 4638 | 7971    |      |        |
|      | 80900' = 22 28 20    |      |      |      | 80900' = 2 14 50    |      |          | 4635 | 7976    |      |        |



| N.     | 0            | 1    | 2    | 3    | 4      | 5           | 6    | 7    | 8    | 9        | P. P.        |
|--------|--------------|------|------|------|--------|-------------|------|------|------|----------|--------------|
| 8100   | 908 4850     | 4904 | 4957 | 5011 | 5065   | 5118        | 5172 | 5225 | 5279 | 5333     |              |
| 01     | 5386         | 5440 | 5494 | 5547 | 5601   | 5654        | 5708 | 5762 | 5815 | 5869     |              |
| 02     | 5922         | 5976 | 6030 | 6083 | 6137   | 6190        | 6244 | 6298 | 6351 | 6405     |              |
| 03     | 6458         | 6512 | 6566 | 6619 | 6673   | 6726        | 6780 | 6834 | 6887 | 6941     |              |
| 04     | 6994         | 7048 | 7102 | 7155 | 7209   | 7262        | 7316 | 7369 | 7423 | 7477     |              |
| 05     | 7530         | 7584 | 7637 | 7691 | 7745   | 7798        | 7852 | 7905 | 7959 | 8012     |              |
| 06     | 8066         | 8120 | 8173 | 8227 | 8280   | 8334        | 8387 | 8441 | 8495 | 8548     |              |
| 07     | 8602         | 8655 | 8709 | 8762 | 8816   | 8870        | 8923 | 8977 | 9030 | 9084     |              |
| 08     | 9137         | 9191 | 9245 | 9298 | 9352   | 9405        | 9459 | 9512 | 9566 | 9619     |              |
| 09     | 9673         | 9727 | 9780 | 9834 | 9887   | 9941        | 9994 | 0048 | 0101 | 0155     |              |
| 8110   | 909 0209     | 0262 | 0316 | 0369 | 0423   | 0476        | 0530 | 0583 | 0637 | 0690     |              |
| 11     | 0744         | 0798 | 0851 | 0905 | 0958   | 1012        | 1065 | 1119 | 1172 | 1226     | 54           |
| 12     | 1279         | 1333 | 1386 | 1440 | 1494   | 1547        | 1601 | 1654 | 1708 | 1761     | 1 5.4        |
| 13     | 1815         | 1868 | 1922 | 1975 | 2029   | 2082        | 2136 | 2189 | 2243 | 2297     | 2 16.2       |
| 14     | 2350         | 2404 | 2457 | 2511 | 2564   | 2618        | 2671 | 2725 | 2778 | 2832     | 3 16.2       |
| 15     | 2885         | 2939 | 2992 | 3046 | 3099   | 3153        | 3206 | 3260 | 3313 | 3367     | 4 27.0       |
| 16     | 3420         | 3474 | 3527 | 3581 | 3634   | 3688        | 3741 | 3795 | 3848 | 3902     | 5 32.4       |
| 17     | 3955         | 4009 | 4062 | 4116 | 4169   | 4223        | 4276 | 4330 | 4383 | 4437     | 6 37.8       |
| 18     | 4490         | 4544 | 4597 | 4651 | 4704   | 4758        | 4811 | 4865 | 4918 | 4972     | 7 43.2       |
| 19     | 5025         | 5079 | 5132 | 5186 | 5239   | 5293        | 5346 | 5400 | 5453 | 5507     | 8 48.6       |
| 8120   | 909 5560     | 5614 | 5667 | 5721 | 5774   | 5828        | 5881 | 5935 | 5988 | 6042     |              |
| 21     | 6095         | 6149 | 6202 | 6256 | 6309   | 6362        | 6416 | 6469 | 6523 | 6576     |              |
| 22     | 6630         | 6683 | 6737 | 6790 | 6844   | 6897        | 6951 | 7004 | 7058 | 7111     |              |
| 23     | 7165         | 7218 | 7271 | 7325 | 7378   | 7432        | 7485 | 7539 | 7592 | 7646     |              |
| 24     | 7699         | 7753 | 7806 | 7860 | 7913   | 7966        | 8020 | 8073 | 8127 | 8180     |              |
| 25     | 8234         | 8287 | 8341 | 8394 | 8447   | 8501        | 8554 | 8608 | 8661 | 8715     |              |
| 26     | 8768         | 8822 | 8875 | 8929 | 8982   | 9035        | 9089 | 9142 | 9196 | 9249     |              |
| 27     | 9303         | 9356 | 9409 | 9463 | 9516   | 9570        | 9623 | 9677 | 9730 | 9784     |              |
| 28     | 9837         | 9890 | 9944 | 9997 | 0051   | 0104        | 0158 | 0211 | 0264 | 0318     |              |
| 29     | 910 0371     | 0425 | 0478 | 0532 | 0585   | 0638        | 0692 | 0745 | 0799 | 0852     |              |
| 8130   | 910 0905     | 0959 | 1012 | 1066 | 1119   | 1173        | 1226 | 1279 | 1333 | 1386     |              |
| 31     | 1440         | 1493 | 1546 | 1600 | 1653   | 1707        | 1760 | 1813 | 1867 | 1920     | 53           |
| 32     | 1974         | 2027 | 2081 | 2134 | 2187   | 2241        | 2294 | 2348 | 2401 | 2454     | 1 5.3        |
| 33     | 2508         | 2561 | 2615 | 2668 | 2721   | 2775        | 2828 | 2882 | 2935 | 2988     | 2 10.6       |
| 34     | 3042         | 3095 | 3148 | 3202 | 3255   | 3309        | 3362 | 3415 | 3469 | 3522     | 3 15.9       |
| 35     | 3576         | 3629 | 3682 | 3736 | 3789   | 3842        | 3896 | 3949 | 4003 | 4056     | 4 21.2       |
| 36     | 4109         | 4163 | 4216 | 4270 | 4323   | 4376        | 4430 | 4483 | 4536 | 4590     | 5 26.5       |
| 37     | 4643         | 4697 | 4750 | 4803 | 4857   | 4910        | 4963 | 5017 | 5070 | 5123     | 6 31.8       |
| 38     | 5177         | 5230 | 5284 | 5337 | 5390   | 5444        | 5497 | 5550 | 5604 | 5657     | 7 37.1       |
| 39     | 5710         | 5764 | 5817 | 5871 | 5924   | 5977        | 6031 | 6084 | 6137 | 6191     | 8 42.4       |
| 8140   | 910 6244     | 6297 | 6351 | 6404 | 6457   | 6511        | 6564 | 6618 | 6671 | 6724     | 9 47.7       |
| 41     | 6778         | 6831 | 6884 | 6938 | 6991   | 7044        | 7098 | 7151 | 7204 | 7258     |              |
| 42     | 7311         | 7364 | 7418 | 7471 | 7524   | 7578        | 7631 | 7684 | 7738 | 7791     |              |
| 43     | 7844         | 7898 | 7951 | 8004 | 8058   | 8111        | 8164 | 8218 | 8271 | 8324     |              |
| 44     | 8378         | 8431 | 8484 | 8538 | 8591   | 8644        | 8698 | 8751 | 8804 | 8858     |              |
| 45     | 8911         | 8964 | 9018 | 9071 | 9124   | 9177        | 9231 | 9284 | 9337 | 9391     |              |
| 46     | 9444         | 9497 | 9551 | 9604 | 9657   | 9711        | 9764 | 9817 | 9871 | 9924     |              |
| 47     | 9977         | 0030 | 0084 | 0137 | 0190   | 0244        | 0297 | 0350 | 0404 | 0457     |              |
| 48     | 911 0510     | 0564 | 0617 | 0670 | 0723   | 0777        | 0830 | 0883 | 0937 | 0990     |              |
| 49     | 1043         | 1096 | 1150 | 1203 | 1256   | 1310        | 1363 | 1416 | 1470 | 1523     |              |
| 8150   | 911 1576     | 1629 | 1683 | 1736 | 1789   | 1843        | 1896 | 1949 | 2002 | 2056     |              |
| N.     | 0            | 1    | 2    | 3    | 4      | 5           | 6    | 7    | 8    | 9        | P. P.        |
| 81000' | = 22° 30' 0" |      |      |      | 81000' | = 2° 15' 0" |      |      |      | S. 4.685 | 4632 T. 7982 |
| 81100' | = 22 31 40   |      |      |      | 81100' | = 2 15 10   |      |      |      |          | 4630 7987    |
| 81200' | = 22 33 20   |      |      |      | 81200' | = 2 15 20   |      |      |      |          | 4627 7993    |
| 81300' | = 22 35 0    |      |      |      | 81300' | = 2 15 30   |      |      |      |          | 4624 7999    |
| 81400' | = 22 36 40   |      |      |      | 81400' | = 2 15 40   |      |      |      |          | 4621 8004    |



| N.    | 0             | 1    | 2    | 3    | 4    | 5            | 6    | 7        | 8     | 9     | P. P.   |
|-------|---------------|------|------|------|------|--------------|------|----------|-------|-------|---------|
| 8150  | 911 1576      | 1629 | 1683 | 1736 | 1789 | 1843         | 1896 | 1949     | 2002  | 2056  |         |
| 51    | 2109          | 2162 | 2215 | 2269 | 2322 | 2375         | 2429 | 2482     | 2535  | 2588  |         |
| 52    | 2642          | 2695 | 2748 | 2802 | 2855 | 2908         | 2961 | 3015     | 3068  | 3121  |         |
| 53    | 3174          | 3228 | 3281 | 3334 | 3387 | 3441         | 3494 | 3547     | 3601  | 3654  |         |
| 54    | 3707          | 3760 | 3814 | 3867 | 3920 | 3973         | 4027 | 4080     | 4133  | 4186  |         |
| 55    | 4240          | 4293 | 4346 | 4399 | 4453 | 4506         | 4559 | 4612     | 4666  | 4719  |         |
| 56    | 4772          | 4825 | 4879 | 4932 | 4985 | 5038         | 5092 | 5145     | 5198  | 5251  |         |
| 57    | 5305          | 5358 | 5411 | 5464 | 5518 | 5571         | 5624 | 5677     | 5731  | 5784  |         |
| 58    | 5837          | 5890 | 5943 | 5997 | 6050 | 6103         | 6156 | 6210     | 6263  | 6316  |         |
| 59    | 6369          | 6423 | 6476 | 6529 | 6582 | 6635         | 6689 | 6742     | 6795  | 6848  |         |
| 8160  | 911 6902      | 6955 | 7008 | 7061 | 7114 | 7168         | 7221 | 7274     | 7327  | 7381  |         |
| 61    | 7434          | 7487 | 7540 | 7593 | 7647 | 7700         | 7753 | 7806     | 7859  | 7913  | 58      |
| 62    | 7966          | 8019 | 8072 | 8126 | 8179 | 8232         | 8285 | 8338     | 8392  | 8445  | 1 5.3   |
| 63    | 8498          | 8551 | 8604 | 8658 | 8711 | 8764         | 8817 | 8870     | 8924  | 8977  | 2 10.6  |
| 64    | 9030          | 9083 | 9136 | 9190 | 9243 | 9296         | 9349 | 9402     | 9456  | 9509  | 3 15.9  |
| 65    | 9562          | 9615 | 9668 | 9721 | 9775 | 9828         | 9881 | 9934     | 9987  | 10041 | 4 21.2  |
| 66    | 912 0094      | 0147 | 0200 | 0253 | 0306 | 0360         | 0413 | 0466     | 0519  | 0572  | 5 26.5  |
| 67    | 0626          | 0679 | 0732 | 0785 | 0838 | 0891         | 0945 | 0998     | 1051  | 1104  | 6 31.8  |
| 68    | 1157          | 1210 | 1264 | 1317 | 1370 | 1423         | 1476 | 1529     | 1583  | 1636  | 7 37.1  |
| 69    | 1689          | 1742 | 1795 | 1848 | 1902 | 1955         | 2008 | 2061     | 2114  | 2167  | 8 42.4  |
| 8170  | 912 2221      | 2274 | 2327 | 2380 | 2433 | 2486         | 2539 | 2593     | 2646  | 2699  | 9 47.7  |
| 71    | 2752          | 2805 | 2858 | 2912 | 2965 | 3018         | 3071 | 3124     | 3177  | 3230  |         |
| 72    | 3284          | 3337 | 3390 | 3443 | 3496 | 3549         | 3602 | 3656     | 3709  | 3762  |         |
| 73    | 3815          | 3868 | 3921 | 3974 | 4028 | 4081         | 4134 | 4187     | 4240  | 4293  |         |
| 74    | 4346          | 4399 | 4453 | 4506 | 4559 | 4612         | 4665 | 4718     | 4771  | 4824  |         |
| 75    | 4878          | 4931 | 4984 | 5037 | 5090 | 5143         | 5196 | 5249     | 5303  | 5356  |         |
| 76    | 5409          | 5462 | 5515 | 5568 | 5621 | 5674         | 5728 | 5781     | 5834  | 5887  |         |
| 77    | 5940          | 5993 | 6046 | 6099 | 6152 | 6206         | 6259 | 6312     | 6365  | 6418  |         |
| 78    | 6471          | 6524 | 6577 | 6630 | 6683 | 6737         | 6790 | 6843     | 6896  | 6949  |         |
| 79    | 7002          | 7055 | 7108 | 7161 | 7214 | 7268         | 7321 | 7374     | 7427  | 7480  |         |
| 8180  | 912 7533      | 7586 | 7639 | 7692 | 7745 | 7798         | 7852 | 7905     | 7958  | 8011  |         |
| 81    | 8064          | 8117 | 8170 | 8223 | 8276 | 8329         | 8382 | 8436     | 8489  | 8542  | 52      |
| 82    | 8595          | 8648 | 8701 | 8754 | 8807 | 8860         | 8913 | 8966     | 9019  | 9072  | 1 5.2   |
| 83    | 9126          | 9179 | 9232 | 9285 | 9338 | 9391         | 9444 | 9497     | 9550  | 9603  | 2 10.4  |
| 84    | 9656          | 9709 | 9762 | 9815 | 9868 | 9922         | 9975 | 10028    | 10081 | 10134 | 3 15.6  |
| 85    | 913 0187      | 0240 | 0293 | 0346 | 0399 | 0452         | 0505 | 0558     | 0611  | 0664  | 4 20.8  |
| 86    | 0717          | 0770 | 0824 | 0877 | 0930 | 0983         | 1036 | 1089     | 1142  | 1195  | 5 26.0  |
| 87    | 1248          | 1301 | 1354 | 1407 | 1460 | 1513         | 1566 | 1619     | 1672  | 1725  | 6 31.2  |
| 88    | 1778          | 1831 | 1884 | 1937 | 1990 | 2044         | 2097 | 2150     | 2203  | 2256  | 7 36.4  |
| 89    | 2309          | 2362 | 2415 | 2468 | 2521 | 2574         | 2627 | 2680     | 2733  | 2786  | 8 41.6  |
| 8190  | 913 2839      | 2892 | 2945 | 2998 | 3051 | 3104         | 3157 | 3210     | 3263  | 3316  | 9 46.8  |
| 91    | 3369          | 3422 | 3475 | 3528 | 3581 | 3634         | 3687 | 3740     | 3793  | 3846  |         |
| 92    | 3899          | 3952 | 4005 | 4058 | 4111 | 4165         | 4218 | 4271     | 4324  | 4377  |         |
| 93    | 4430          | 4483 | 4536 | 4589 | 4642 | 4695         | 4748 | 4801     | 4854  | 4907  |         |
| 94    | 4960          | 5013 | 5066 | 5119 | 5172 | 5225         | 5278 | 5331     | 5384  | 5437  |         |
| 95    | 5490          | 5543 | 5596 | 5649 | 5702 | 5755         | 5808 | 5861     | 5914  | 5967  |         |
| 96    | 6019          | 6072 | 6125 | 6178 | 6231 | 6284         | 6337 | 6390     | 6443  | 6496  |         |
| 97    | 6549          | 6602 | 6655 | 6708 | 6761 | 6814         | 6867 | 6920     | 6973  | 7026  |         |
| 98    | 7079          | 7132 | 7185 | 7238 | 7291 | 7344         | 7397 | 7450     | 7503  | 7556  |         |
| 99    | 7609          | 7662 | 7715 | 7768 | 7821 | 7874         | 7927 | 7980     | 8033  | 8086  |         |
| 8200  | 913 8139      | 8191 | 8244 | 8297 | 8350 | 8403         | 8456 | 8509     | 8562  | 8615  |         |
| N.    | 0             | 1    | 2    | 3    | 4    | 5            | 6    | 7        | 8     | 9     | P. P.   |
| 81500 | = 22° 38' 20" |      |      |      | 8150 | = 2° 15' 50" |      | S. 4.685 |       | 4619  | T. 8010 |
| 81600 | = 22 40 0     |      |      |      | 8160 | = 2 16 0     |      |          |       | 4616  | 8015    |
| 81700 | = 22 41 20    |      |      |      | 8170 | = 2 16 10    |      |          |       | 4613  | 8021    |
| 81800 | = 22 43 20    |      |      |      | 8180 | = 2 16 20    |      |          |       | 4610  | 8026    |
| 81900 | = 22 45 0     |      |      |      | 8190 | = 2 16 30    |      |          |       | 4607  | 8032    |



| N.   | 0        | 1           | 2    | 3    | 4     | 5          | 6        | 7    | 8       | 9    | P. P.  |
|------|----------|-------------|------|------|-------|------------|----------|------|---------|------|--------|
| 8200 | 913 8139 | 8191        | 8244 | 8297 | 8350  | 8403       | 8456     | 8509 | 8562    | 8615 |        |
| 01   | 8668     | 8721        | 8774 | 8827 | 8880  | 8933       | 8986     | 9039 | 9092    | 9145 |        |
| 02   | 9198     | 9251        | 9304 | 9356 | 9409  | 9462       | 9515     | 9568 | 9621    | 9674 |        |
| 03   | 9727     | 9780        | 9833 | 9886 | 9939  | 9992       | 0045     | 0098 | 0151    | 0204 |        |
| 04   | 914 0257 | 0309        | 0362 | 0415 | 0468  | 0521       | 0574     | 0627 | 0680    | 0733 |        |
| 05   | 0786     | 0839        | 0892 | 0945 | 0998  | 1050       | 1103     | 1156 | 1209    | 1262 |        |
| 06   | 1315     | 1368        | 1421 | 1474 | 1527  | 1580       | 1633     | 1686 | 1738    | 1791 |        |
| 07   | 1844     | 1897        | 1950 | 2003 | 2056  | 2109       | 2162     | 2215 | 2268    | 2321 |        |
| 08   | 2373     | 2426        | 2479 | 2532 | 2585  | 2638       | 2691     | 2744 | 2797    | 2850 |        |
| 09   | 2903     | 2955        | 3008 | 3061 | 3114  | 3167       | 3220     | 3273 | 3326    | 3379 |        |
| 8210 | 914 3432 | 3484        | 3537 | 3590 | 3643  | 3696       | 3749     | 3802 | 3855    | 3908 |        |
| 11   | 3961     | 4013        | 4066 | 4119 | 4172  | 4225       | 4278     | 4331 | 4384    | 4437 |        |
| 12   | 4489     | 4542        | 4595 | 4648 | 4701  | 4754       | 4807     | 4860 | 4912    | 4965 | 1 5.3  |
| 13   | 5018     | 5071        | 5124 | 5177 | 5230  | 5283       | 5335     | 5388 | 5441    | 5494 | 2 10.6 |
| 14   | 5547     | 5600        | 5653 | 5706 | 5758  | 5811       | 5864     | 5917 | 5970    | 6023 | 3 15.9 |
| 15   | 6076     | 6129        | 6181 | 6234 | 6287  | 6340       | 6393     | 6446 | 6499    | 6551 | 4 21.2 |
| 16   | 6604     | 6657        | 6710 | 6763 | 6816  | 6869       | 6921     | 6974 | 7027    | 7080 | 5 26.5 |
| 17   | 7133     | 7186        | 7239 | 7291 | 7344  | 7397       | 7450     | 7503 | 7556    | 7609 | 6 31.8 |
| 18   | 7661     | 7714        | 7767 | 7820 | 7873  | 7926       | 7978     | 8031 | 8084    | 8137 | 7 37.1 |
| 19   | 8190     | 8243        | 8295 | 8348 | 8401  | 8454       | 8507     | 8560 | 8613    | 8665 | 8 42.4 |
| 8220 | 914 8718 | 8771        | 8824 | 8877 | 8930  | 8982       | 9035     | 9088 | 9141    | 9194 | 9 47.7 |
| 21   | 9246     | 9299        | 9352 | 9405 | 9458  | 9511       | 9563     | 9616 | 9669    | 9722 |        |
| 22   | 9775     | 9828        | 9880 | 9933 | 9986  | 0039       | 0092     | 0144 | 0197    | 0250 |        |
| 23   | 915 0303 | 0356        | 0409 | 0461 | 0514  | 0567       | 0620     | 0673 | 0725    | 0778 |        |
| 24   | 0831     | 0884        | 0937 | 0989 | 1042  | 1095       | 1148     | 1201 | 1253    | 1306 |        |
| 25   | 1359     | 1412        | 1465 | 1517 | 1570  | 1623       | 1676     | 1729 | 1781    | 1834 |        |
| 26   | 1887     | 1940        | 1993 | 2045 | 2098  | 2151       | 2204     | 2257 | 2309    | 2362 |        |
| 27   | 2415     | 2468        | 2521 | 2573 | 2626  | 2679       | 2732     | 2784 | 2837    | 2890 |        |
| 28   | 2943     | 2996        | 3048 | 3101 | 3154  | 3207       | 3260     | 3312 | 3365    | 3418 |        |
| 29   | 3471     | 3523        | 3576 | 3629 | 3682  | 3734       | 3787     | 3840 | 3893    | 3946 |        |
| 8230 | 915 3998 | 4051        | 4104 | 4157 | 4209  | 4262       | 4315     | 4368 | 4420    | 4473 |        |
| 31   | 4526     | 4579        | 4632 | 4684 | 4737  | 4790       | 4843     | 4895 | 4948    | 5001 |        |
| 32   | 5054     | 5106        | 5159 | 5212 | 5265  | 5317       | 5370     | 5423 | 5476    | 5528 | 1 5.2  |
| 33   | 5581     | 5634        | 5687 | 5739 | 5792  | 5845       | 5898     | 5950 | 6003    | 6056 | 2 10.4 |
| 34   | 6109     | 6161        | 6214 | 6267 | 6320  | 6372       | 6425     | 6478 | 6531    | 6583 | 3 15.6 |
| 35   | 6636     | 6689        | 6742 | 6794 | 6847  | 6900       | 6952     | 7005 | 7058    | 7111 | 4 20.8 |
| 36   | 7163     | 7216        | 7269 | 7322 | 7374  | 7427       | 7480     | 7532 | 7585    | 7638 | 5 26.0 |
| 37   | 7691     | 7743        | 7796 | 7849 | 7902  | 7954       | 8007     | 8060 | 8112    | 8165 | 6 31.2 |
| 38   | 8218     | 8271        | 8323 | 8376 | 8429  | 8481       | 8534     | 8587 | 8640    | 8692 | 7 36.4 |
| 39   | 8745     | 8798        | 8850 | 8903 | 8956  | 9009       | 9061     | 9114 | 9167    | 9219 | 8 41.6 |
| 8240 | 915 9272 | 9325        | 9378 | 9430 | 9483  | 9536       | 9588     | 9641 | 9694    | 9746 | 9 46.8 |
| 41   | 9799     | 9852        | 9905 | 9957 | 0010  | 0063       | 0115     | 0168 | 0221    | 0273 |        |
| 42   | 916 0326 | 0379        | 0431 | 0484 | 0537  | 0590       | 0642     | 0695 | 0748    | 0800 |        |
| 43   | 0853     | 0906        | 0958 | 1011 | 1064  | 1116       | 1169     | 1222 | 1274    | 1327 |        |
| 44   | 1380     | 1433        | 1485 | 1538 | 1591  | 1643       | 1696     | 1749 | 1801    | 1854 |        |
| 45   | 1907     | 1959        | 2012 | 2065 | 2117  | 2170       | 2223     | 2275 | 2328    | 2381 |        |
| 46   | 2433     | 2486        | 2539 | 2591 | 2644  | 2697       | 2749     | 2802 | 2855    | 2907 |        |
| 47   | 2960     | 3013        | 3065 | 3118 | 3171  | 3223       | 3276     | 3329 | 3381    | 3434 |        |
| 48   | 3487     | 3539        | 3592 | 3644 | 3697  | 3750       | 3802     | 3855 | 3908    | 3960 |        |
| 49   | 4013     | 4066        | 4118 | 4171 | 4224  | 4276       | 4329     | 4382 | 4434    | 4487 |        |
| 8250 | 916 4539 | 4592        | 4645 | 4697 | 4750  | 4803       | 4855     | 4908 | 4961    | 5013 |        |
| N.   | 0        | 1           | 2    | 3    | 4     | 5          | 6        | 7    | 8       | 9    | P. P.  |
|      | 82000    | 22° 46' 40" |      |      | 82000 | 2° 16' 40" | S. 4.685 | 4605 | T. 8037 |      |        |
|      | 82100    | 22 48 20    |      |      | 82100 | 2 16 50    |          | 4602 | 8043    |      |        |
|      | 82200    | 22 50 0     |      |      | 82200 | 2 17 0     |          | 4599 | 8049    |      |        |
|      | 82300    | 22 51 40    |      |      | 82300 | 2 17 10    |          | 4596 | 8054    |      |        |
|      | 82400    | 22 53 20    |      |      | 82400 | 2 17 20    |          | 4593 | 8060    |      |        |



| N.    | 0             | 1    | 2    | 3    | 4     | 5            | 6        | 7    | 8       | 9    | P. P.  |
|-------|---------------|------|------|------|-------|--------------|----------|------|---------|------|--------|
| 8250  | 916 4539      | 4592 | 4645 | 4697 | 4750  | 4803         | 4855     | 4908 | 4961    | 5013 |        |
| 51    | 5066          | 5119 | 5171 | 5224 | 5276  | 5329         | 5382     | 5434 | 5487    | 5540 |        |
| 52    | 5592          | 5645 | 5697 | 5750 | 5803  | 5855         | 5908     | 5961 | 6013    | 6066 |        |
| 53    | 6118          | 6171 | 6224 | 6276 | 6329  | 6382         | 6434     | 6487 | 6539    | 6592 |        |
| 54    | 6645          | 6697 | 6750 | 6802 | 6855  | 6908         | 6960     | 7013 | 7066    | 7118 |        |
| 55    | 7171          | 7223 | 7276 | 7329 | 7381  | 7434         | 7486     | 7539 | 7592    | 7644 |        |
| 56    | 7697          | 7749 | 7802 | 7855 | 7907  | 7960         | 8012     | 8065 | 8118    | 8170 |        |
| 57    | 8223          | 8275 | 8328 | 8381 | 8433  | 8486         | 8538     | 8591 | 8644    | 8696 |        |
| 58    | 8749          | 8801 | 8854 | 8907 | 8959  | 9012         | 9064     | 9117 | 9169    | 9222 |        |
| 59    | 9275          | 9327 | 9380 | 9432 | 9485  | 9538         | 9590     | 9643 | 9695    | 9748 |        |
| 8260  | 916 9800      | 9853 | 9906 | 9958 | 0011  | 0063         | 0116     | 0169 | 0221    | 0274 |        |
| 61    | 917 0326      | 0379 | 0431 | 0484 | 0537  | 0589         | 0642     | 0694 | 0747    | 0799 | 53     |
| 62    | 0852          | 0904 | 0957 | 1010 | 1062  | 1115         | 1167     | 1220 | 1272    | 1325 | 1 5.3  |
| 63    | 1378          | 1430 | 1483 | 1535 | 1588  | 1640         | 1693     | 1745 | 1798    | 1851 | 2 10.6 |
| 64    | 1903          | 1956 | 2008 | 2061 | 2113  | 2166         | 2218     | 2271 | 2323    | 2376 | 3 15.9 |
| 65    | 2429          | 2481 | 2534 | 2586 | 2639  | 2691         | 2744     | 2796 | 2849    | 2901 | 4 21.2 |
| 66    | 2954          | 3007 | 3059 | 3112 | 3164  | 3217         | 3269     | 3322 | 3374    | 3427 | 5 26.5 |
| 67    | 3479          | 3532 | 3584 | 3637 | 3690  | 3742         | 3795     | 3847 | 3900    | 3952 | 6 31.8 |
| 68    | 4005          | 4057 | 4110 | 4162 | 4215  | 4267         | 4320     | 4372 | 4425    | 4477 | 7 37.1 |
| 69    | 4530          | 4582 | 4635 | 4687 | 4740  | 4793         | 4845     | 4898 | 4950    | 5003 | 8 42.4 |
| 8270  | 917 5055      | 5108 | 5160 | 5213 | 5265  | 5318         | 5370     | 5423 | 5475    | 5528 | 9 47.7 |
| 71    | 5580          | 5633 | 5685 | 5738 | 5790  | 5843         | 5895     | 5948 | 6000    | 6053 |        |
| 72    | 6105          | 6158 | 6210 | 6263 | 6315  | 6368         | 6420     | 6473 | 6525    | 6578 |        |
| 73    | 6630          | 6683 | 6735 | 6788 | 6840  | 6893         | 6945     | 6998 | 7050    | 7103 |        |
| 74    | 7155          | 7208 | 7260 | 7313 | 7365  | 7418         | 7470     | 7523 | 7575    | 7628 |        |
| 75    | 7680          | 7733 | 7785 | 7837 | 7890  | 7942         | 7995     | 8047 | 8100    | 8152 |        |
| 76    | 8205          | 8257 | 8310 | 8362 | 8415  | 8467         | 8520     | 8572 | 8625    | 8677 |        |
| 77    | 8730          | 8782 | 8834 | 8887 | 8939  | 8992         | 9044     | 9097 | 9149    | 9202 |        |
| 78    | 9254          | 9307 | 9359 | 9412 | 9464  | 9517         | 9569     | 9621 | 9674    | 9726 |        |
| 79    | 9779          | 9831 | 9884 | 9936 | 9989  | 0041         | 0094     | 0146 | 0198    | 0251 |        |
| 8280  | 918 0303      | 0356 | 0408 | 0461 | 0513  | 0566         | 0618     | 0671 | 0723    | 0775 |        |
| 81    | 0828          | 0880 | 0933 | 0985 | 1038  | 1090         | 1143     | 1195 | 1247    | 1300 | 52     |
| 82    | 1352          | 1405 | 1457 | 1510 | 1562  | 1614         | 1667     | 1719 | 1772    | 1824 | 1 5.2  |
| 83    | 1877          | 1929 | 1981 | 2034 | 2086  | 2139         | 2191     | 2244 | 2296    | 2348 | 2 10.4 |
| 84    | 2401          | 2453 | 2506 | 2558 | 2611  | 2663         | 2715     | 2768 | 2820    | 2873 | 3 15.6 |
| 85    | 2925          | 2978 | 3030 | 3082 | 3135  | 3187         | 3240     | 3292 | 3344    | 3397 | 4 20.8 |
| 86    | 3449          | 3502 | 3554 | 3607 | 3659  | 3711         | 3764     | 3816 | 3869    | 3921 | 5 26.0 |
| 87    | 3973          | 4026 | 4078 | 4131 | 4183  | 4235         | 4288     | 4340 | 4393    | 4445 | 6 31.2 |
| 88    | 4497          | 4550 | 4602 | 4655 | 4707  | 4759         | 4812     | 4864 | 4917    | 4969 | 7 36.4 |
| 89    | 5021          | 5074 | 5126 | 5179 | 5231  | 5283         | 5336     | 5388 | 5441    | 5493 | 8 41.6 |
| 8290  | 918 5545      | 5598 | 5650 | 5702 | 5755  | 5807         | 5860     | 5912 | 5964    | 6017 |        |
| 91    | 6069          | 6122 | 6174 | 6226 | 6279  | 6331         | 6383     | 6436 | 6488    | 6541 |        |
| 92    | 6593          | 6645 | 6698 | 6750 | 6802  | 6855         | 6907     | 6960 | 7012    | 7064 |        |
| 93    | 7117          | 7169 | 7221 | 7274 | 7326  | 7378         | 7431     | 7483 | 7536    | 7588 |        |
| 94    | 7640          | 7693 | 7745 | 7797 | 7850  | 7902         | 7954     | 8007 | 8059    | 8112 |        |
| 95    | 8164          | 8216 | 8269 | 8321 | 8373  | 8426         | 8478     | 8530 | 8583    | 8635 |        |
| 96    | 8687          | 8740 | 8792 | 8844 | 8897  | 8949         | 9002     | 9054 | 9106    | 9159 |        |
| 97    | 9211          | 9263 | 9316 | 9368 | 9420  | 9473         | 9525     | 9577 | 9630    | 9682 |        |
| 98    | 9734          | 9787 | 9839 | 9891 | 9944  | 9996         | 0048     | 0101 | 0153    | 0205 |        |
| 99    | 919 0258      | 0310 | 0362 | 0415 | 0467  | 0519         | 0572     | 0624 | 0676    | 0729 |        |
| 8300  | 919 0781      | 0833 | 0886 | 0938 | 0990  | 1043         | 1095     | 1147 | 1200    | 1252 |        |
| N.    | 0             | 1    | 2    | 3    | 4     | 5            | 6        | 7    | 8       | 9    | P. P.  |
| 82500 | = 22° 55' 0"  |      |      |      | 82500 | = 2° 17' 30" | S. 4.685 | 4591 | T. 8065 |      |        |
| 82600 | = 22° 56' 40" |      |      |      | 82600 | = 2° 17' 40" |          | 4588 | 8071    |      |        |
| 82700 | = 22° 58' 20" |      |      |      | 82700 | = 2° 17' 50" |          | 4585 | 8077    |      |        |
| 82800 | = 23° 0' 0"   |      |      |      | 82800 | = 2° 18' 0"  |          | 4582 | 8082    |      |        |
| 82900 | = 23° 1' 40"  |      |      |      | 82900 | = 2° 18' 10" |          | 4579 | 8088    |      |        |



| N.   | 0                   | 1    | 2    | 3    | 4                  | 5    | 6    | 7        | 8    | 9       | P. P.  |
|------|---------------------|------|------|------|--------------------|------|------|----------|------|---------|--------|
| 8800 | 919 0781            | 0833 | 0886 | 0938 | 0990               | 1043 | 1095 | 1147     | 1200 | 1252    |        |
| 01   | 1304                | 1356 | 1409 | 1461 | 1513               | 1566 | 1618 | 1670     | 1723 | 1775    |        |
| 02   | 1827                | 1880 | 1932 | 1984 | 2037               | 2089 | 2141 | 2193     | 2246 | 2298    |        |
| 03   | 2350                | 2403 | 2455 | 2507 | 2560               | 2612 | 2664 | 2717     | 2769 | 2821    |        |
| 04   | 2873                | 2926 | 2978 | 3030 | 3083               | 3135 | 3187 | 3239     | 3292 | 3344    |        |
| 05   | 3396                | 3449 | 3501 | 3553 | 3606               | 3658 | 3710 | 3762     | 3815 | 3867    |        |
| 06   | 3919                | 3972 | 4024 | 4076 | 4128               | 4181 | 4233 | 4285     | 4338 | 4390    |        |
| 07   | 4442                | 4494 | 4547 | 4599 | 4651               | 4703 | 4756 | 4808     | 4860 | 4913    |        |
| 08   | 4965                | 5017 | 5069 | 5122 | 5174               | 5226 | 5279 | 5331     | 5383 | 5435    |        |
| 09   | 5488                | 5540 | 5592 | 5644 | 5697               | 5749 | 5801 | 5853     | 5906 | 5958    |        |
| 8810 | 919 6010            | 6062 | 6115 | 6167 | 6219               | 6272 | 6324 | 6376     | 6428 | 6481    |        |
| 11   | 6533                | 6585 | 6637 | 6690 | 6742               | 6794 | 6846 | 6899     | 6951 | 7003    | 53     |
| 12   | 7055                | 7108 | 7160 | 7212 | 7264               | 7317 | 7369 | 7421     | 7473 | 7526    | 1 5.3  |
| 13   | 7578                | 7630 | 7682 | 7735 | 7787               | 7839 | 7891 | 7943     | 7995 | 8048    | 2 10.6 |
| 14   | 8100                | 8152 | 8205 | 8257 | 8309               | 8361 | 8414 | 8466     | 8518 | 8570    | 3 15.9 |
| 15   | 8623                | 8675 | 8727 | 8779 | 8831               | 8884 | 8936 | 8988     | 9040 | 9093    | 4 21.2 |
| 16   | 9145                | 9197 | 9249 | 9301 | 9354               | 9406 | 9458 | 9510     | 9563 | 9615    | 5 26.5 |
| 17   | 9667                | 9719 | 9771 | 9824 | 9876               | 9928 | 9980 | 0033     | 0085 | 0137    | 6 31.8 |
| 18   | 920 0189            | 0241 | 0294 | 0346 | 0398               | 0450 | 0502 | 0555     | 0607 | 0659    | 7 37.1 |
| 19   | 0711                | 0763 | 0816 | 0868 | 0920               | 0972 | 1024 | 1077     | 1129 | 1181    | 8 42.4 |
| 8820 | 920 1233            | 1285 | 1338 | 1390 | 1442               | 1494 | 1546 | 1599     | 1651 | 1703    | 9 47.7 |
| 21   | 1755                | 1807 | 1860 | 1912 | 1964               | 2016 | 2068 | 2121     | 2173 | 2225    |        |
| 22   | 2277                | 2329 | 2381 | 2434 | 2486               | 2538 | 2590 | 2642     | 2695 | 2747    |        |
| 23   | 2799                | 2851 | 2903 | 2955 | 3008               | 3060 | 3112 | 3164     | 3216 | 3269    |        |
| 24   | 3321                | 3373 | 3425 | 3477 | 3529               | 3582 | 3634 | 3686     | 3738 | 3790    |        |
| 25   | 3842                | 3895 | 3947 | 3999 | 4051               | 4103 | 4155 | 4208     | 4260 | 4312    |        |
| 26   | 4364                | 4416 | 4468 | 4521 | 4573               | 4625 | 4677 | 4729     | 4781 | 4833    |        |
| 27   | 4886                | 4938 | 4990 | 5042 | 5094               | 5146 | 5199 | 5251     | 5303 | 5355    |        |
| 28   | 5407                | 5459 | 5511 | 5564 | 5616               | 5668 | 5720 | 5772     | 5824 | 5876    |        |
| 29   | 5929                | 5981 | 6033 | 6085 | 6137               | 6189 | 6241 | 6294     | 6346 | 6398    |        |
| 8830 | 920 6450            | 6502 | 6554 | 6606 | 6659               | 6711 | 6763 | 6815     | 6867 | 6919    |        |
| 31   | 6971                | 7023 | 7076 | 7128 | 7180               | 7232 | 7284 | 7336     | 7388 | 7440    | 52     |
| 32   | 7493                | 7545 | 7597 | 7649 | 7701               | 7753 | 7805 | 7857     | 7909 | 7962    | 1 5.2  |
| 33   | 8014                | 8066 | 8118 | 8170 | 8222               | 8274 | 8327 | 8379     | 8431 | 8483    | 2 10.4 |
| 34   | 8535                | 8587 | 8639 | 8691 | 8743               | 8796 | 8848 | 8900     | 8952 | 9004    | 3 15.6 |
| 35   | 9056                | 9108 | 9160 | 9212 | 9264               | 9317 | 9369 | 9421     | 9473 | 9525    | 4 20.8 |
| 36   | 9577                | 9629 | 9681 | 9733 | 9785               | 9838 | 9890 | 9942     | 9994 | 0046    | 5 26.0 |
| 37   | 921 0098            | 0150 | 0202 | 0254 | 0306               | 0358 | 0411 | 0463     | 0515 | 0567    | 6 31.2 |
| 38   | 0619                | 0671 | 0723 | 0775 | 0827               | 0879 | 0931 | 0983     | 1036 | 1088    | 7 36.4 |
| 39   | 1140                | 1192 | 1244 | 1296 | 1348               | 1400 | 1452 | 1504     | 1556 | 1608    | 8 41.6 |
| 8840 | 921 1661            | 1713 | 1765 | 1817 | 1869               | 1921 | 1973 | 2025     | 2077 | 2129    | 9 46.8 |
| 41   | 2181                | 2233 | 2285 | 2337 | 2389               | 2442 | 2494 | 2546     | 2598 | 2650    |        |
| 42   | 2702                | 2754 | 2806 | 2858 | 2910               | 2962 | 3014 | 3066     | 3118 | 3170    |        |
| 43   | 3222                | 3274 | 3327 | 3379 | 3431               | 3483 | 3535 | 3587     | 3639 | 3691    |        |
| 44   | 3743                | 3795 | 3847 | 3899 | 3951               | 4003 | 4055 | 4107     | 4159 | 4211    |        |
| 45   | 4263                | 4315 | 4367 | 4420 | 4472               | 4524 | 4576 | 4628     | 4680 | 4732    |        |
| 46   | 4784                | 4836 | 4888 | 4940 | 4992               | 5044 | 5096 | 5148     | 5200 | 5252    |        |
| 47   | 5304                | 5356 | 5408 | 5460 | 5512               | 5564 | 5616 | 5668     | 5720 | 5772    |        |
| 48   | 5824                | 5876 | 5928 | 5980 | 6032               | 6085 | 6137 | 6189     | 6241 | 6293    |        |
| 49   | 6345                | 6397 | 6449 | 6501 | 6553               | 6605 | 6657 | 6709     | 6761 | 6813    |        |
| 8850 | 921 6865            | 6917 | 6969 | 7021 | 7073               | 7125 | 7177 | 7229     | 7281 | 7333    |        |
| N.   | 0                   | 1    | 2    | 3    | 4                  | 5    | 6    | 7        | 8    | 9       | P. P.  |
|      | 83000' = 23° 3' 20" |      |      |      | 8300' = 2° 18' 20" |      |      | S. 4.685 | 4577 | T. 8094 |        |
|      | 83100' = 23° 5' 0"  |      |      |      | 8310' = 2° 18' 30" |      |      |          | 4574 | 8099    |        |
|      | 83200' = 23° 6' 40" |      |      |      | 8320' = 2° 18' 40" |      |      |          | 4571 | 8105    |        |
|      | 83300' = 23° 8' 20" |      |      |      | 8330' = 2° 18' 50" |      |      |          | 4568 | 8111    |        |
|      | 83400' = 23° 10' 0" |      |      |      | 8340' = 2° 19' 0"  |      |      |          | 4565 | 8116    |        |







| N.   | 0            | 1    | 2    | 3    | 4     | 5           | 6        | 7     | 8       | 9     | P. P. |
|------|--------------|------|------|------|-------|-------------|----------|-------|---------|-------|-------|
| 8400 | 924 2793     | 2845 | 2896 | 2948 | 3000  | 3051        | 3103     | 3155  | 3206    | 3258  |       |
| 01   | 3310         | 3362 | 3413 | 3465 | 3517  | 3568        | 3620     | 3672  | 3723    | 3775  |       |
| 02   | 3827         | 3878 | 3930 | 3982 | 4034  | 4085        | 4137     | 4189  | 4240    | 4292  |       |
| 03   | 4344         | 4395 | 4447 | 4499 | 4550  | 4602        | 4654     | 4705  | 4757    | 4809  |       |
| 04   | 4860         | 4912 | 4964 | 5015 | 5067  | 5119        | 5170     | 5222  | 5274    | 5326  |       |
| 05   | 5377         | 5429 | 5481 | 5532 | 5584  | 5636        | 5687     | 5739  | 5791    | 5842  |       |
| 06   | 5894         | 5946 | 5997 | 6049 | 6101  | 6152        | 6204     | 6255  | 6307    | 6359  |       |
| 07   | 6410         | 6462 | 6514 | 6565 | 6617  | 6669        | 6720     | 6772  | 6824    | 6875  |       |
| 08   | 6927         | 6979 | 7030 | 7082 | 7134  | 7185        | 7237     | 7289  | 7340    | 7392  |       |
| 09   | 7444         | 7495 | 7547 | 7598 | 7650  | 7702        | 7753     | 7805  | 7857    | 7908  |       |
| 8410 | 924 7960     | 8012 | 8063 | 8115 | 8167  | 8218        | 8270     | 8321  | 8373    | 8425  |       |
| 11   | 8476         | 8528 | 8580 | 8631 | 8683  | 8734        | 8786     | 8838  | 8889    | 8941  | 5.2   |
| 12   | 8993         | 9044 | 9096 | 9148 | 9199  | 9251        | 9302     | 9354  | 9406    | 9457  | 5.1   |
| 13   | 9509         | 9561 | 9612 | 9664 | 9715  | 9767        | 9819     | 9870  | 9922    | 9973  | 10.4  |
| 14   | 925 0025     | 0077 | 0128 | 0180 | 0232  | 0283        | 0335     | 0386  | 0438    | 0490  | 15.6  |
| 15   | 0541         | 0593 | 0644 | 0696 | 0748  | 0799        | 0851     | 0902  | 0954    | 1006  | 20.8  |
| 16   | 1057         | 1109 | 1160 | 1212 | 1264  | 1315        | 1367     | 1418  | 1470    | 1522  | 26.0  |
| 17   | 1573         | 1625 | 1676 | 1728 | 1780  | 1831        | 1883     | 1934  | 1986    | 2038  | 31.2  |
| 18   | 2089         | 2141 | 2192 | 2244 | 2296  | 2347        | 2399     | 2450  | 2502    | 2554  | 36.4  |
| 19   | 2605         | 2657 | 2708 | 2760 | 2811  | 2863        | 2915     | 2966  | 3018    | 3069  | 41.6  |
| 8420 | 925 3121     | 3172 | 3224 | 3276 | 3327  | 3379        | 3430     | 3482  | 3534    | 3585  |       |
| 21   | 3637         | 3688 | 3740 | 3791 | 3843  | 3895        | 3946     | 3998  | 4049    | 4101  |       |
| 22   | 4152         | 4204 | 4256 | 4307 | 4359  | 4410        | 4462     | 4513  | 4565    | 4616  |       |
| 23   | 4668         | 4720 | 4771 | 4823 | 4874  | 4926        | 4977     | 5029  | 5080    | 5132  |       |
| 24   | 5184         | 5235 | 5287 | 5338 | 5390  | 5441        | 5493     | 5544  | 5596    | 5648  |       |
| 25   | 5699         | 5751 | 5802 | 5854 | 5905  | 5957        | 6008     | 6060  | 6111    | 6163  |       |
| 26   | 6215         | 6266 | 6318 | 6369 | 6421  | 6472        | 6524     | 6575  | 6627    | 6678  |       |
| 27   | 6730         | 6781 | 6833 | 6885 | 6936  | 6988        | 7039     | 7091  | 7142    | 7194  |       |
| 28   | 7245         | 7297 | 7348 | 7400 | 7451  | 7503        | 7554     | 7606  | 7657    | 7709  |       |
| 29   | 7761         | 7812 | 7864 | 7915 | 7967  | 8018        | 8070     | 8121  | 8173    | 8224  |       |
| 8430 | 925 8276     | 8327 | 8379 | 8430 | 8482  | 8533        | 8585     | 8636  | 8688    | 8739  |       |
| 31   | 8791         | 8842 | 8894 | 8945 | 8997  | 9048        | 9100     | 9151  | 9203    | 9254  | 51    |
| 32   | 9306         | 9357 | 9409 | 9460 | 9512  | 9563        | 9615     | 9667  | 9718    | 9770  | 5.1   |
| 33   | 9821         | 9873 | 9924 | 9975 | 10027 | 10078       | 10130    | 10181 | 10233   | 10284 | 10.1  |
| 34   | 926 0336     | 0387 | 0439 | 0490 | 0542  | 0593        | 0645     | 0696  | 0748    | 0799  | 15.3  |
| 35   | 0851         | 0902 | 0954 | 1005 | 1057  | 1108        | 1160     | 1211  | 1263    | 1314  | 20.4  |
| 36   | 1366         | 1417 | 1469 | 1520 | 1572  | 1623        | 1675     | 1726  | 1778    | 1829  | 25.5  |
| 37   | 1880         | 1932 | 1983 | 2035 | 2086  | 2138        | 2189     | 2241  | 2292    | 2344  | 30.6  |
| 38   | 2395         | 2447 | 2498 | 2550 | 2601  | 2653        | 2704     | 2755  | 2807    | 2858  | 35.7  |
| 39   | 2910         | 2961 | 3013 | 3064 | 3116  | 3167        | 3219     | 3270  | 3322    | 3373  | 40.8  |
| 8440 | 926 3444     | 3476 | 3527 | 3579 | 3630  | 3682        | 3733     | 3785  | 3836    | 3888  | 45.9  |
| 41   | 3939         | 3990 | 4042 | 4093 | 4145  | 4196        | 4248     | 4299  | 4351    | 4402  |       |
| 42   | 4453         | 4505 | 4556 | 4608 | 4659  | 4711        | 4762     | 4814  | 4865    | 4916  |       |
| 43   | 4968         | 5019 | 5071 | 5122 | 5174  | 5225        | 5277     | 5328  | 5379    | 5431  |       |
| 44   | 5482         | 5534 | 5585 | 5637 | 5688  | 5739        | 5791     | 5842  | 5894    | 5945  |       |
| 45   | 5997         | 6048 | 6099 | 6151 | 6202  | 6254        | 6305     | 6357  | 6408    | 6459  |       |
| 46   | 6511         | 6562 | 6614 | 6665 | 6716  | 6768        | 6819     | 6871  | 6922    | 6974  |       |
| 47   | 7025         | 7076 | 7128 | 7179 | 7231  | 7282        | 7333     | 7385  | 7436    | 7488  |       |
| 48   | 7539         | 7590 | 7642 | 7693 | 7745  | 7796        | 7847     | 7899  | 7950    | 8002  |       |
| 49   | 8053         | 8105 | 8156 | 8207 | 8259  | 8310        | 8362     | 8413  | 8464    | 8516  |       |
| 8450 | 926 8567     | 8618 | 8670 | 8721 | 8773  | 8824        | 8875     | 8927  | 8978    | 9030  |       |
| N.   | 0            | 1    | 2    | 3    | 4     | 5           | 6        | 7     | 8       | 9     | P. P. |
| 8400 | = 23° 20' 0" |      |      |      | 8400  | = 2° 20' 0" | S. 4.685 | 4548  | T. 8150 |       |       |
| 8410 | = 23 21 40   |      |      |      | 8410  | = 2 20 10   |          | 4545  | 8156    |       |       |
| 8420 | = 23 23 20   |      |      |      | 8420  | = 2 20 20   |          | 4542  | 8162    |       |       |
| 8430 | = 23 25 0    |      |      |      | 8430  | = 2 20 30   |          | 4540  | 8168    |       |       |
| 8440 | = 23 26 40   |      |      |      | 8440  | = 2 20 40   |          | 4537  | 8173    |       |       |



| N.   | 0                    | 1    | 2    | 3     | 4                  | 5     | 6        | 7     | 8       | 9     | P. P.  |
|------|----------------------|------|------|-------|--------------------|-------|----------|-------|---------|-------|--------|
| 8450 | 926 8567             | 8618 | 8670 | 8721  | 8773               | 8824  | 8875     | 8927  | 8978    | 9030  |        |
| 51   | 9081                 | 9132 | 9184 | 9235  | 9287               | 9338  | 9389     | 9441  | 9492    | 9543  |        |
| 52   | 9595                 | 9646 | 9698 | 9749  | 9800               | 9852  | 9903     | 9955  | 10006   | 10057 |        |
| 53   | 927 0109             | 0160 | 0211 | 0263  | 0314               | 0366  | 0417     | 0468  | 0520    | 0571  |        |
| 54   | 0622                 | 0674 | 0725 | 0777  | 0828               | 0879  | 0931     | 0982  | 1033    | 1085  |        |
| 55   | 1136                 | 1187 | 1239 | 1290  | 1342               | 1393  | 1444     | 1496  | 1547    | 1598  |        |
| 56   | 1650                 | 1701 | 1752 | 1804  | 1855               | 1907  | 1958     | 2009  | 2061    | 2112  |        |
| 57   | 2163                 | 2215 | 2266 | 2317  | 2369               | 2420  | 2471     | 2523  | 2574    | 2625  |        |
| 58   | 2677                 | 2728 | 2780 | 2831  | 2882               | 2934  | 2985     | 3036  | 3088    | 3139  |        |
| 59   | 3190                 | 3242 | 3293 | 3344  | 3396               | 3447  | 3498     | 3550  | 3601    | 3652  |        |
| 8460 | 927 3704             | 3755 | 3806 | 3858  | 3909               | 3960  | 4012     | 4063  | 4114    | 4166  |        |
| 61   | 4217                 | 4268 | 4320 | 4371  | 4422               | 4474  | 4525     | 4576  | 4628    | 4679  | 52     |
| 62   | 4730                 | 4782 | 4833 | 4884  | 4935               | 4987  | 5038     | 5089  | 5141    | 5192  | 1 5.2  |
| 63   | 5243                 | 5295 | 5346 | 5397  | 5449               | 5500  | 5551     | 5603  | 5654    | 5705  | 2 10.4 |
| 64   | 5757                 | 5808 | 5859 | 5910  | 5962               | 6013  | 6064     | 6116  | 6167    | 6218  | 3 15.6 |
| 65   | 6270                 | 6321 | 6372 | 6424  | 6475               | 6526  | 6577     | 6629  | 6680    | 6731  | 4 20.8 |
| 66   | 6783                 | 6834 | 6885 | 6937  | 6988               | 7039  | 7090     | 7142  | 7193    | 7244  | 5 26.0 |
| 67   | 7296                 | 7347 | 7398 | 7449  | 7501               | 7552  | 7603     | 7655  | 7706    | 7757  | 6 31.2 |
| 68   | 7808                 | 7860 | 7911 | 7962  | 8014               | 8065  | 8116     | 8167  | 8219    | 8270  | 7 36.4 |
| 69   | 8321                 | 8373 | 8424 | 8475  | 8526               | 8578  | 8629     | 8680  | 8732    | 8783  | 8 41.6 |
| 8470 | 927 8834             | 8885 | 8937 | 8988  | 9039               | 9090  | 9142     | 9193  | 9244    | 9296  | 9 46.8 |
| 71   | 9347                 | 9398 | 9449 | 9501  | 9552               | 9603  | 9654     | 9706  | 9757    | 9808  |        |
| 72   | 9859                 | 9911 | 9962 | 10013 | 10065              | 10116 | 10167    | 10218 | 10270   | 10321 |        |
| 73   | 928 0372             | 0423 | 0475 | 0526  | 0577               | 0628  | 0680     | 0731  | 0782    | 0833  |        |
| 74   | 0885                 | 0936 | 0987 | 1038  | 1090               | 1141  | 1192     | 1243  | 1295    | 1346  |        |
| 75   | 1397                 | 1448 | 1500 | 1551  | 1602               | 1653  | 1705     | 1756  | 1807    | 1858  |        |
| 76   | 1909                 | 1961 | 2012 | 2063  | 2114               | 2166  | 2217     | 2268  | 2319    | 2371  |        |
| 77   | 2422                 | 2473 | 2524 | 2576  | 2627               | 2678  | 2729     | 2780  | 2832    | 2883  |        |
| 78   | 2934                 | 2985 | 3037 | 3088  | 3139               | 3190  | 3241     | 3293  | 3344    | 3395  |        |
| 79   | 3446                 | 3498 | 3549 | 3600  | 3651               | 3702  | 3754     | 3805  | 3856    | 3907  |        |
| 8480 | 928 3959             | 4010 | 4061 | 4112  | 4163               | 4215  | 4266     | 4317  | 4368    | 4419  |        |
| 81   | 4471                 | 4522 | 4573 | 4624  | 4675               | 4727  | 4778     | 4829  | 4880    | 4931  | 51     |
| 82   | 4983                 | 5034 | 5085 | 5136  | 5187               | 5239  | 5290     | 5341  | 5392    | 5443  | 1 5.1  |
| 83   | 5495                 | 5546 | 5597 | 5648  | 5699               | 5751  | 5802     | 5853  | 5904    | 5955  | 2 10.2 |
| 84   | 6007                 | 6058 | 6109 | 6160  | 6211               | 6263  | 6314     | 6365  | 6416    | 6467  | 3 15.3 |
| 85   | 6518                 | 6570 | 6621 | 6672  | 6723               | 6774  | 6826     | 6877  | 6928    | 6979  | 4 20.4 |
| 86   | 7030                 | 7081 | 7133 | 7184  | 7235               | 7286  | 7337     | 7389  | 7440    | 7491  | 5 25.5 |
| 87   | 7542                 | 7593 | 7644 | 7696  | 7747               | 7798  | 7849     | 7900  | 7951    | 8003  | 6 30.6 |
| 88   | 8054                 | 8105 | 8156 | 8207  | 8258               | 8310  | 8361     | 8412  | 8463    | 8514  | 7 35.7 |
| 89   | 8565                 | 8616 | 8668 | 8719  | 8770               | 8821  | 8872     | 8923  | 8975    | 9026  | 8 40.8 |
| 8490 | 928 9077             | 9128 | 9179 | 9230  | 9282               | 9333  | 9384     | 9435  | 9486    | 9537  | 9 45.9 |
| 91   | 9588                 | 9640 | 9691 | 9742  | 9793               | 9844  | 9895     | 9946  | 9998    | 10049 |        |
| 92   | 929 0100             | 0151 | 0202 | 0253  | 0304               | 0356  | 0407     | 0458  | 0509    | 0560  |        |
| 93   | 0611                 | 0662 | 0714 | 0765  | 0816               | 0867  | 0918     | 0969  | 1020    | 1071  |        |
| 94   | 1123                 | 1174 | 1225 | 1276  | 1327               | 1378  | 1429     | 1480  | 1532    | 1583  |        |
| 95   | 1634                 | 1685 | 1736 | 1787  | 1838               | 1889  | 1941     | 1992  | 2043    | 2094  |        |
| 96   | 2145                 | 2196 | 2247 | 2298  | 2350               | 2401  | 2452     | 2503  | 2554    | 2605  |        |
| 97   | 2656                 | 2707 | 2758 | 2810  | 2861               | 2912  | 2963     | 3014  | 3065    | 3116  |        |
| 98   | 3167                 | 3218 | 3269 | 3321  | 3372               | 3423  | 3474     | 3525  | 3576    | 3627  |        |
| 99   | 3678                 | 3729 | 3780 | 3832  | 3883               | 3934  | 3985     | 4036  | 4087    | 4138  |        |
| 8500 | 929 4189             | 4240 | 4291 | 4343  | 4394               | 4445  | 4496     | 4547  | 4598    | 4649  |        |
| N.   | 0                    | 1    | 2    | 3     | 4                  | 5     | 6        | 7     | 8       | 9     | P. P.  |
|      | 84500" = 23° 28' 20" |      |      |       | 8450" = 2° 20' 50" |       | S. 4.685 | 4534  | T. 8179 |       |        |
|      | 84600" = 23 30 0     |      |      |       | 8460" = 2 21 0     |       |          | 4531  | 8185    |       |        |
|      | 84700" = 23 31 40    |      |      |       | 8470" = 2 21 10    |       |          | 4528  | 8191    |       |        |
|      | 84800" = 23 33 20    |      |      |       | 8480" = 2 21 20    |       |          | 4525  | 8196    |       |        |
|      | 84900" = 23 35 0     |      |      |       | 8490" = 2 21 30    |       |          | 4522  | 8202    |       |        |



| N.    | 0             | 1    | 2    | 3     | 4            | 5    | 6    | 7        | 8    | 9       | P. P.  |
|-------|---------------|------|------|-------|--------------|------|------|----------|------|---------|--------|
| 8500  | 929 4189      | 4240 | 4291 | 4343  | 4394         | 4445 | 4496 | 4547     | 4598 | 4649    |        |
| 01    | 4700          | 4751 | 4802 | 4853  | 4905         | 4956 | 5007 | 5058     | 5109 | 5160    |        |
| 02    | 5211          | 5262 | 5313 | 5364  | 5415         | 5466 | 5517 | 5569     | 5620 | 5671    |        |
| 03    | 5722          | 5773 | 5824 | 5875  | 5926         | 5977 | 6028 | 6079     | 6130 | 6181    |        |
| 04    | 6233          | 6284 | 6335 | 6386  | 6437         | 6488 | 6539 | 6590     | 6641 | 6692    |        |
| 05    | 6743          | 6794 | 6845 | 6896  | 6947         | 6998 | 7050 | 7101     | 7152 | 7203    |        |
| 06    | 7254          | 7305 | 7356 | 7407  | 7458         | 7509 | 7560 | 7611     | 7662 | 7713    |        |
| 07    | 7764          | 7815 | 7866 | 7917  | 7969         | 8020 | 8071 | 8122     | 8173 | 8224    |        |
| 08    | 8275          | 8326 | 8377 | 8428  | 8479         | 8530 | 8581 | 8632     | 8683 | 8734    |        |
| 09    | 8785          | 8836 | 8887 | 8938  | 8989         | 9040 | 9091 | 9142     | 9194 | 9245    |        |
| 8510  | 929 9296      | 9347 | 9398 | 9449  | 9500         | 9551 | 9602 | 9653     | 9704 | 9755    |        |
| 11    | 9806          | 9857 | 9908 | 9959  | 0010         | 0061 | 0112 | 0163     | 0214 | 0265    | 52     |
| 12    | 930 0316      | 0367 | 0418 | 0469  | 0520         | 0571 | 0622 | 0673     | 0724 | 0775    | 1 5.2  |
| 13    | 0826          | 0877 | 0928 | 0979  | 1030         | 1081 | 1132 | 1183     | 1234 | 1285    | 2 10.4 |
| 14    | 1336          | 1387 | 1438 | 1489  | 1540         | 1591 | 1643 | 1694     | 1745 | 1796    | 3 15.6 |
| 15    | 1847          | 1898 | 1949 | 2000  | 2051         | 2102 | 2153 | 2204     | 2255 | 2306    | 4 20.8 |
| 16    | 2357          | 2408 | 2459 | 2510  | 2561         | 2612 | 2663 | 2713     | 2764 | 2815    | 5 26.0 |
| 17    | 2866          | 2917 | 2968 | 3019  | 3070         | 3121 | 3172 | 3223     | 3274 | 3325    | 6 31.2 |
| 18    | 3376          | 3427 | 3478 | 3529  | 3580         | 3631 | 3682 | 3733     | 3784 | 3835    | 7 36.4 |
| 19    | 3886          | 3937 | 3988 | 4039  | 4090         | 4141 | 4192 | 4243     | 4294 | 4345    | 8 41.6 |
| 8520  | 930 4396      | 4447 | 4498 | 4549  | 4600         | 4651 | 4702 | 4753     | 4804 | 4855    | 9 46.8 |
| 21    | 4906          | 4957 | 5008 | 5059  | 5110         | 5160 | 5211 | 5262     | 5313 | 5364    |        |
| 22    | 5415          | 5466 | 5517 | 5568  | 5619         | 5670 | 5721 | 5772     | 5823 | 5874    |        |
| 23    | 5925          | 5976 | 6027 | 6078  | 6129         | 6180 | 6231 | 6282     | 6333 | 6383    |        |
| 24    | 6434          | 6485 | 6536 | 6587  | 6638         | 6689 | 6740 | 6791     | 6842 | 6893    |        |
| 25    | 6944          | 6995 | 7046 | 7097  | 7148         | 7199 | 7250 | 7300     | 7351 | 7402    |        |
| 26    | 7453          | 7504 | 7555 | 7606  | 7657         | 7708 | 7759 | 7810     | 7861 | 7912    |        |
| 27    | 7963          | 8014 | 8064 | 8115  | 8166         | 8217 | 8268 | 8319     | 8370 | 8421    |        |
| 28    | 8472          | 8523 | 8574 | 8625  | 8676         | 8727 | 8777 | 8828     | 8879 | 8930    |        |
| 29    | 8981          | 9032 | 9083 | 9134  | 9185         | 9236 | 9287 | 9338     | 9388 | 9439    |        |
| 8530  | 930 9490      | 9541 | 9592 | 9643  | 9694         | 9745 | 9796 | 9847     | 9898 | 9949    |        |
| 31    | 9999          | 0050 | 0101 | 0152  | 0203         | 0254 | 0305 | 0356     | 0407 | 0458    | 51     |
| 32    | 931 0508      | 0559 | 0610 | 0661  | 0712         | 0763 | 0814 | 0865     | 0916 | 0967    | 1 5.1  |
| 33    | 1017          | 1068 | 1119 | 1170  | 1221         | 1272 | 1323 | 1374     | 1425 | 1475    | 2 10.2 |
| 34    | 1526          | 1577 | 1628 | 1679  | 1730         | 1781 | 1832 | 1883     | 1933 | 1984    | 3 15.3 |
| 35    | 2035          | 2086 | 2137 | 2188  | 2239         | 2290 | 2341 | 2391     | 2442 | 2493    | 4 20.4 |
| 36    | 2544          | 2595 | 2646 | 2697  | 2748         | 2798 | 2849 | 2900     | 2951 | 3002    | 5 25.5 |
| 37    | 3053          | 3104 | 3155 | 3205  | 3256         | 3307 | 3358 | 3409     | 3460 | 3511    | 6 30.6 |
| 38    | 3562          | 3612 | 3663 | 3714  | 3765         | 3816 | 3867 | 3918     | 3968 | 4019    | 7 35.7 |
| 39    | 4070          | 4121 | 4172 | 4223  | 4274         | 4324 | 4375 | 4426     | 4477 | 4528    | 8 40.8 |
| 8540  | 931 4579      | 4630 | 4680 | 4731  | 4782         | 4833 | 4884 | 4935     | 4986 | 5036    | 9 45.9 |
| 41    | 5087          | 5138 | 5189 | 5240  | 5291         | 5341 | 5392 | 5443     | 5494 | 5545    |        |
| 42    | 5596          | 5647 | 5697 | 5748  | 5799         | 5850 | 5901 | 5952     | 6002 | 6053    |        |
| 43    | 6104          | 6155 | 6206 | 6257  | 6307         | 6358 | 6409 | 6460     | 6511 | 6562    |        |
| 44    | 6612          | 6663 | 6714 | 6765  | 6816         | 6867 | 6917 | 6968     | 7019 | 7070    |        |
| 45    | 7121          | 7171 | 7222 | 7273  | 7324         | 7375 | 7426 | 7476     | 7527 | 7578    |        |
| 46    | 7629          | 7680 | 7731 | 7781  | 7832         | 7883 | 7934 | 7985     | 8035 | 8086    |        |
| 47    | 8137          | 8188 | 8239 | 8289  | 8340         | 8391 | 8442 | 8493     | 8544 | 8594    |        |
| 48    | 8645          | 8696 | 8747 | 8798  | 8848         | 8899 | 8950 | 9001     | 9052 | 9102    |        |
| 49    | 9153          | 9204 | 9255 | 9306  | 9356         | 9407 | 9458 | 9509     | 9560 | 9610    |        |
| 8550  | 931 9661      | 9712 | 9763 | 9814  | 9864         | 9915 | 9966 | 0017     | 0067 | 0118    |        |
| N.    | 0             | 1    | 2    | 3     | 4            | 5    | 6    | 7        | 8    | 9       | P. P.  |
| 85000 | = 23° 36' 40" |      |      | 85000 | = 2° 21' 40" |      |      | S. 4.685 | 4519 | T. 8208 |        |
| 85100 | = 23 38 20    |      |      | 85100 | = 2 21 50    |      |      |          | 4517 | 8214    |        |
| 85200 | = 23 40 0     |      |      | 85200 | = 2 22 0     |      |      |          | 4514 | 8220    |        |
| 85300 | = 23 41 40    |      |      | 85300 | = 2 22 10    |      |      |          | 4511 | 8225    |        |
| 85400 | = 23 43 20    |      |      | 85400 | = 2 22 20    |      |      |          | 4508 | 8231    |        |



| N.   | 0                   | 1    | 2    | 3    | 4                  | 5    | 6    | 7        | 8    | 9       | P. P.  |
|------|---------------------|------|------|------|--------------------|------|------|----------|------|---------|--------|
| 8550 | 931 9661            | 9712 | 9763 | 9814 | 9864               | 9915 | 9966 | 0017     | 0067 | 0118    |        |
| 51   | 932 0169            | 0220 | 0271 | 0321 | 0372               | 0423 | 0474 | 0525     | 0575 | 0626    |        |
| 52   | 0677                | 0728 | 0778 | 0829 | 0880               | 0931 | 0982 | 1032     | 1083 | 1134    |        |
| 53   | 1185                | 1235 | 1286 | 1337 | 1388               | 1439 | 1489 | 1540     | 1591 | 1642    |        |
| 54   | 1692                | 1743 | 1794 | 1845 | 1896               | 1946 | 1997 | 2048     | 2099 | 2149    |        |
| 55   | 2200                | 2251 | 2302 | 2352 | 2403               | 2454 | 2505 | 2555     | 2606 | 2657    |        |
| 56   | 2708                | 2759 | 2809 | 2860 | 2911               | 2962 | 3012 | 3063     | 3114 | 3165    |        |
| 57   | 3215                | 3266 | 3317 | 3368 | 3418               | 3469 | 3520 | 3571     | 3621 | 3672    |        |
| 58   | 3723                | 3774 | 3824 | 3875 | 3926               | 3977 | 4027 | 4078     | 4129 | 4180    |        |
| 59   | 4230                | 4281 | 4332 | 4382 | 4433               | 4484 | 4535 | 4585     | 4636 | 4687    |        |
| 8560 | 932 4738            | 4788 | 4839 | 4890 | 4941               | 4991 | 5042 | 5093     | 5144 | 5194    |        |
| 61   | 5245                | 5296 | 5346 | 5397 | 5448               | 5499 | 5549 | 5600     | 5651 | 5702    | 51     |
| 62   | 5752                | 5803 | 5854 | 5904 | 5955               | 6006 | 6057 | 6107     | 6158 | 6209    | 1 5.1  |
| 63   | 6259                | 6310 | 6361 | 6412 | 6462               | 6513 | 6564 | 6614     | 6665 | 6716    | 2 10.2 |
| 64   | 6767                | 6817 | 6868 | 6919 | 6969               | 7020 | 7071 | 7122     | 7172 | 7223    | 3 15.3 |
| 65   | 7274                | 7324 | 7375 | 7426 | 7476               | 7527 | 7578 | 7629     | 7679 | 7730    | 4 20.4 |
| 66   | 7781                | 7831 | 7882 | 7933 | 7983               | 8034 | 8085 | 8136     | 8186 | 8237    | 5 25.5 |
| 67   | 8288                | 8338 | 8389 | 8440 | 8490               | 8541 | 8592 | 8643     | 8693 | 8744    | 6 30.6 |
| 68   | 8795                | 8845 | 8896 | 8947 | 8997               | 9048 | 9099 | 9149     | 9200 | 9251    | 7 35.7 |
| 69   | 9301                | 9352 | 9403 | 9453 | 9504               | 9555 | 9606 | 9656     | 9707 | 9758    | 8 40.8 |
| 8570 | 932 9808            | 9859 | 9910 | 9960 | 0011               | 0062 | 0112 | 0163     | 0214 | 0264    | 9 45.9 |
| 71   | 933 0315            | 0366 | 0416 | 0467 | 0518               | 0568 | 0619 | 0670     | 0720 | 0771    |        |
| 72   | 0822                | 0872 | 0923 | 0974 | 1024               | 1075 | 1126 | 1176     | 1227 | 1278    |        |
| 73   | 1328                | 1379 | 1430 | 1480 | 1531               | 1582 | 1632 | 1683     | 1733 | 1784    |        |
| 74   | 1835                | 1885 | 1936 | 1987 | 2037               | 2088 | 2139 | 2189     | 2240 | 2291    |        |
| 75   | 2341                | 2392 | 2443 | 2493 | 2544               | 2595 | 2645 | 2696     | 2746 | 2797    |        |
| 76   | 2848                | 2898 | 2949 | 3000 | 3050               | 3101 | 3152 | 3202     | 3253 | 3303    |        |
| 77   | 3354                | 3405 | 3455 | 3506 | 3557               | 3607 | 3658 | 3709     | 3759 | 3810    |        |
| 78   | 3860                | 3911 | 3962 | 4012 | 4063               | 4114 | 4164 | 4215     | 4265 | 4316    |        |
| 79   | 4367                | 4417 | 4468 | 4519 | 4569               | 4620 | 4670 | 4721     | 4772 | 4822    |        |
| 8580 | 933 4873            | 4923 | 4974 | 5025 | 5075               | 5126 | 5177 | 5227     | 5278 | 5328    |        |
| 81   | 5379                | 5430 | 5480 | 5531 | 5581               | 5632 | 5683 | 5733     | 5784 | 5834    | 50     |
| 82   | 5885                | 5936 | 5986 | 6037 | 6088               | 6138 | 6189 | 6239     | 6290 | 6341    | 1 5.0  |
| 83   | 6391                | 6442 | 6492 | 6543 | 6594               | 6644 | 6695 | 6745     | 6796 | 6846    | 2 10.0 |
| 84   | 6897                | 6948 | 6998 | 7049 | 7099               | 7150 | 7201 | 7251     | 7302 | 7352    | 3 15.0 |
| 85   | 7403                | 7454 | 7504 | 7555 | 7605               | 7656 | 7707 | 7757     | 7808 | 7858    | 4 20.0 |
| 86   | 7909                | 7959 | 8010 | 8061 | 8111               | 8162 | 8212 | 8263     | 8313 | 8364    | 5 25.0 |
| 87   | 8415                | 8465 | 8516 | 8566 | 8617               | 8668 | 8718 | 8769     | 8819 | 8870    | 6 30.0 |
| 88   | 8920                | 8971 | 9021 | 9072 | 9123               | 9173 | 9224 | 9274     | 9325 | 9375    | 7 35.0 |
| 89   | 9426                | 9477 | 9527 | 9578 | 9628               | 9679 | 9729 | 9780     | 9831 | 9881    | 8 40.0 |
| 8590 | 933 9932            | 9982 | 0033 | 0083 | 0134               | 0184 | 0235 | 0286     | 0336 | 0387    | 9 45.0 |
| 91   | 934 0437            | 0488 | 0538 | 0589 | 0639               | 0690 | 0740 | 0791     | 0842 | 0892    |        |
| 92   | 0943                | 0993 | 1044 | 1094 | 1145               | 1195 | 1246 | 1296     | 1347 | 1398    |        |
| 93   | 1448                | 1499 | 1549 | 1600 | 1650               | 1701 | 1751 | 1802     | 1852 | 1903    |        |
| 94   | 1953                | 2004 | 2055 | 2105 | 2156               | 2206 | 2257 | 2307     | 2358 | 2408    |        |
| 95   | 2459                | 2509 | 2560 | 2610 | 2661               | 2711 | 2762 | 2812     | 2863 | 2914    |        |
| 96   | 2964                | 3015 | 3065 | 3116 | 3166               | 3217 | 3267 | 3318     | 3368 | 3419    |        |
| 97   | 3469                | 3520 | 3570 | 3621 | 3671               | 3722 | 3772 | 3823     | 3873 | 3924    |        |
| 98   | 3974                | 4025 | 4075 | 4126 | 4176               | 4227 | 4277 | 4328     | 4378 | 4429    |        |
| 99   | 4479                | 4530 | 4580 | 4631 | 4682               | 4732 | 4783 | 4833     | 4884 | 4934    |        |
| 8600 | 934 4985            | 5035 | 5086 | 5136 | 5187               | 5237 | 5287 | 5338     | 5388 | 5439    |        |
| N.   | 0                   | 1    | 2    | 3    | 4                  | 5    | 6    | 7        | 8    | 9       | P. P.  |
|      | 85500' = 23° 45' 0" |      |      |      | 8550' = 2° 22' 30" |      |      | S. 4.685 | 4505 | T. 8237 |        |
|      | 85600' = 23 46 40   |      |      |      | 8560' = 2 22 40    |      |      |          | 4502 | 8243    |        |
|      | 85700' = 23 48 20   |      |      |      | 8570' = 2 22 50    |      |      |          | 4499 | 8249    |        |
|      | 85800' = 23 50 0    |      |      |      | 8580' = 2 23 0     |      |      |          | 4496 | 8255    |        |
|      | 85900' = 23 51 40   |      |      |      | 8590' = 2 23 10    |      |      |          | 4493 | 8260    |        |



| N.    | 0             | 1    | 2    | 3     | 4            | 5    | 6    | 7        | 8    | 9       | P. P.  |
|-------|---------------|------|------|-------|--------------|------|------|----------|------|---------|--------|
| 8600  | 934 4985      | 5035 | 5086 | 5136  | 5187         | 5237 | 5287 | 5338     | 5388 | 5439    |        |
| 01    | 5489          | 5540 | 5590 | 5641  | 5691         | 5742 | 5792 | 5843     | 5893 | 5944    |        |
| 02    | 5994          | 6045 | 6095 | 6146  | 6196         | 6247 | 6297 | 6348     | 6398 | 6449    |        |
| 03    | 6499          | 6550 | 6600 | 6651  | 6701         | 6752 | 6802 | 6853     | 6903 | 6954    |        |
| 04    | 7004          | 7054 | 7105 | 7155  | 7206         | 7256 | 7307 | 7357     | 7408 | 7458    |        |
| 05    | 7509          | 7559 | 7610 | 7660  | 7711         | 7761 | 7812 | 7862     | 7912 | 7963    |        |
| 06    | 8013          | 8064 | 8114 | 8165  | 8215         | 8266 | 8316 | 8367     | 8417 | 8468    |        |
| 07    | 8518          | 8568 | 8619 | 8669  | 8720         | 8770 | 8821 | 8871     | 8922 | 8972    |        |
| 08    | 9023          | 9073 | 9123 | 9174  | 9224         | 9275 | 9325 | 9376     | 9426 | 9477    |        |
| 09    | 9527          | 9578 | 9628 | 9678  | 9729         | 9779 | 9830 | 9880     | 9931 | 9981    |        |
| 8610  | 935 0032      | 0082 | 0132 | 0183  | 0233         | 0284 | 0334 | 0385     | 0435 | 0485    |        |
| 11    | 0536          | 0586 | 0637 | 0687  | 0738         | 0788 | 0838 | 0889     | 0939 | 0990    | 51     |
| 12    | 1040          | 1091 | 1141 | 1191  | 1242         | 1292 | 1343 | 1393     | 1444 | 1494    | 1 5.1  |
| 13    | 1544          | 1595 | 1645 | 1696  | 1746         | 1797 | 1847 | 1897     | 1948 | 1998    | 2 10.2 |
| 14    | 2049          | 2099 | 2150 | 2200  | 2250         | 2301 | 2351 | 2402     | 2452 | 2502    | 3 15.3 |
| 15    | 2553          | 2603 | 2654 | 2704  | 2754         | 2805 | 2855 | 2906     | 2956 | 3006    | 4 20.4 |
| 16    | 3057          | 3107 | 3158 | 3208  | 3259         | 3309 | 3359 | 3410     | 3460 | 3511    | 5 25.5 |
| 17    | 3561          | 3611 | 3662 | 3712  | 3763         | 3813 | 3863 | 3914     | 3964 | 4015    | 6 30.6 |
| 18    | 4065          | 4115 | 4166 | 4216  | 4266         | 4317 | 4367 | 4418     | 4468 | 4518    | 7 35.7 |
| 19    | 4569          | 4619 | 4670 | 4720  | 4770         | 4821 | 4871 | 4922     | 4972 | 5022    | 8 40.8 |
| 8620  | 935 5073      | 5123 | 5173 | 5224  | 5274         | 5325 | 5375 | 5425     | 5476 | 5526    | 9 45.9 |
| 21    | 5576          | 5627 | 5677 | 5728  | 5778         | 5828 | 5879 | 5929     | 5979 | 6030    |        |
| 22    | 6080          | 6131 | 6181 | 6231  | 6282         | 6332 | 6382 | 6433     | 6483 | 6533    |        |
| 23    | 6584          | 6634 | 6685 | 6735  | 6785         | 6836 | 6886 | 6936     | 6987 | 7037    |        |
| 24    | 7087          | 7138 | 7188 | 7239  | 7289         | 7339 | 7390 | 7440     | 7490 | 7541    |        |
| 25    | 7591          | 7641 | 7692 | 7742  | 7792         | 7843 | 7893 | 7943     | 7994 | 8044    |        |
| 26    | 8095          | 8145 | 8195 | 8246  | 8296         | 8346 | 8397 | 8447     | 8497 | 8548    |        |
| 27    | 8598          | 8648 | 8699 | 8749  | 8799         | 8850 | 8900 | 8950     | 9001 | 9051    |        |
| 28    | 9101          | 9152 | 9202 | 9252  | 9303         | 9353 | 9403 | 9454     | 9504 | 9554    |        |
| 29    | 9605          | 9655 | 9705 | 9756  | 9806         | 9856 | 9907 | 9957     | 0007 | 0058    |        |
| 8630  | 936 0108      | 0158 | 0209 | 0259  | 0309         | 0360 | 0410 | 0460     | 0511 | 0561    |        |
| 31    | 0611          | 0661 | 0712 | 0762  | 0812         | 0863 | 0913 | 0963     | 1014 | 1064    | 50     |
| 32    | 1114          | 1165 | 1215 | 1265  | 1316         | 1366 | 1416 | 1466     | 1517 | 1567    | 1 5.0  |
| 33    | 1617          | 1668 | 1718 | 1768  | 1819         | 1869 | 1919 | 1970     | 2020 | 2070    | 2 10.0 |
| 34    | 2120          | 2171 | 2221 | 2271  | 2322         | 2372 | 2422 | 2473     | 2523 | 2573    | 3 15.0 |
| 35    | 2623          | 2674 | 2724 | 2774  | 2825         | 2875 | 2925 | 2975     | 3026 | 3076    | 4 20.0 |
| 36    | 3126          | 3177 | 3227 | 3277  | 3327         | 3378 | 3428 | 3478     | 3529 | 3579    | 5 25.0 |
| 37    | 3629          | 3679 | 3730 | 3780  | 3830         | 3881 | 3931 | 3981     | 4031 | 4082    | 6 30.0 |
| 38    | 4132          | 4182 | 4233 | 4283  | 4333         | 4383 | 4434 | 4484     | 4534 | 4584    | 7 35.0 |
| 39    | 4635          | 4685 | 4735 | 4786  | 4836         | 4886 | 4936 | 4987     | 5037 | 5087    | 8 40.0 |
| 8640  | 936 5137      | 5188 | 5238 | 5288  | 5338         | 5389 | 5439 | 5489     | 5540 | 5590    | 9 45.0 |
| 41    | 5640          | 5690 | 5741 | 5791  | 5841         | 5891 | 5942 | 5992     | 6042 | 6092    |        |
| 42    | 6143          | 6193 | 6243 | 6293  | 6344         | 6394 | 6444 | 6494     | 6545 | 6595    |        |
| 43    | 6645          | 6695 | 6746 | 6796  | 6846         | 6896 | 6947 | 6997     | 7047 | 7097    |        |
| 44    | 7148          | 7198 | 7248 | 7298  | 7349         | 7399 | 7449 | 7499     | 7550 | 7600    |        |
| 45    | 7650          | 7700 | 7750 | 7801  | 7851         | 7901 | 7951 | 8002     | 8052 | 8102    |        |
| 46    | 8152          | 8203 | 8253 | 8303  | 8353         | 8403 | 8454 | 8504     | 8554 | 8604    |        |
| 47    | 8655          | 8705 | 8755 | 8805  | 8855         | 8906 | 8956 | 9006     | 9056 | 9107    |        |
| 48    | 9157          | 9207 | 9257 | 9307  | 9358         | 9408 | 9458 | 9508     | 9559 | 9609    |        |
| 49    | 9659          | 9709 | 9759 | 9810  | 9860         | 9910 | 9960 | 0010     | 0061 | 0111    |        |
| 8650  | 937 0161      | 0211 | 0261 | 0312  | 0362         | 0412 | 0462 | 0513     | 0563 | 0613    |        |
| N.    | 0             | 1    | 2    | 3     | 4            | 5    | 6    | 7        | 8    | 9       | P. P.  |
| 86000 | = 23° 53' 20" |      |      | 86000 | = 2° 23' 20" |      |      | S. 4.685 | 4490 | T. 8266 |        |
| 86100 | = 23° 55' 0"  |      |      | 86100 | = 2° 23' 30" |      |      |          | 4487 | 8272    |        |
| 86200 | = 23° 56' 40" |      |      | 86200 | = 2° 23' 40" |      |      |          | 4484 | 8278    |        |
| 86300 | = 23° 58' 20" |      |      | 86300 | = 2° 23' 50" |      |      |          | 4482 | 8284    |        |
| 86400 | = 24° 0' 0"   |      |      | 86400 | = 2° 24' 0"  |      |      |          | 4479 | 8290    |        |



| N.    | 0        | 1      | 2    | 3    | 4                  | 5    | 6    | 7        | 8    | 9       | P. P.  |
|-------|----------|--------|------|------|--------------------|------|------|----------|------|---------|--------|
| 8650  | 937 0161 | 0211   | 0261 | 0312 | 0362               | 0412 | 0462 | 0513     | 0563 | 0613    |        |
| 51    | 0663     | 0713   | 0764 | 0814 | 0864               | 0914 | 0964 | 1015     | 1065 | 1115    |        |
| 52    | 1165     | 1215   | 1265 | 1316 | 1356               | 1416 | 1466 | 1516     | 1567 | 1617    |        |
| 53    | 1667     | 1717   | 1767 | 1818 | 1868               | 1918 | 1968 | 2018     | 2069 | 2119    |        |
| 54    | 2169     | 2219   | 2269 | 2319 | 2370               | 2420 | 2470 | 2520     | 2570 | 2621    |        |
| 55    | 2671     | 2721   | 2771 | 2821 | 2871               | 2922 | 2972 | 3022     | 3072 | 3122    |        |
| 56    | 3172     | 3223   | 3273 | 3323 | 3373               | 3423 | 3474 | 3524     | 3574 | 3624    |        |
| 57    | 3674     | 3724   | 3775 | 3825 | 3875               | 3925 | 3975 | 4025     | 4075 | 4126    |        |
| 58    | 4176     | 4226   | 4276 | 4326 | 4376               | 4427 | 4477 | 4527     | 4577 | 4627    |        |
| 59    | 4677     | 4728   | 4778 | 4828 | 4878               | 4928 | 4978 | 5028     | 5079 | 5129    |        |
| 8660  | 937 5179 | 5229   | 5279 | 5329 | 5380               | 5430 | 5480 | 5530     | 5580 | 5630    |        |
| 61    | 5680     | 5731   | 5781 | 5831 | 5881               | 5931 | 5981 | 6031     | 6082 | 6132    | 50     |
| 62    | 6182     | 6232   | 6282 | 6332 | 6382               | 6432 | 6483 | 6533     | 6583 | 6633    | 1 5.0  |
| 63    | 6683     | 6733   | 6783 | 6834 | 6884               | 6934 | 6984 | 7034     | 7084 | 7134    | 2 10.0 |
| 64    | 7184     | 7235   | 7285 | 7335 | 7385               | 7435 | 7485 | 7535     | 7585 | 7636    | 3 15.0 |
| 65    | 7686     | 7736   | 7786 | 7836 | 7886               | 7936 | 7986 | 8037     | 8087 | 8137    | 4 20.0 |
| 66    | 8187     | 8237   | 8287 | 8337 | 8387               | 8437 | 8488 | 8538     | 8588 | 8638    | 5 25.0 |
| 67    | 8688     | 8738   | 8788 | 8838 | 8888               | 8939 | 8989 | 9039     | 9089 | 9139    | 6 30.0 |
| 68    | 9189     | 9239   | 9289 | 9339 | 9389               | 9440 | 9490 | 9540     | 9590 | 9640    | 7 35.0 |
| 69    | 9690     | 9740   | 9790 | 9840 | 9890               | 9941 | 9991 | 0041     | 0091 | 0141    | 8 40.0 |
| 8670  | 938 0191 | 0241   | 0291 | 0341 | 0391               | 0441 | 0492 | 0542     | 0592 | 0642    | 9 45.0 |
| 71    | 0692     | 0742   | 0792 | 0842 | 0892               | 0942 | 0992 | 1042     | 1093 | 1143    |        |
| 72    | 1193     | 1243   | 1293 | 1343 | 1393               | 1443 | 1493 | 1543     | 1593 | 1643    |        |
| 73    | 1693     | 1744   | 1794 | 1844 | 1894               | 1944 | 1994 | 2044     | 2094 | 2144    |        |
| 74    | 2194     | 2244   | 2294 | 2344 | 2394               | 2445 | 2495 | 2545     | 2595 | 2645    |        |
| 75    | 2695     | 2745   | 2795 | 2845 | 2895               | 2945 | 2995 | 3045     | 3095 | 3145    |        |
| 76    | 3195     | 3245   | 3296 | 3346 | 3396               | 3446 | 3496 | 3546     | 3596 | 3646    |        |
| 77    | 3696     | 3746   | 3796 | 3846 | 3896               | 3946 | 3996 | 4046     | 4096 | 4146    |        |
| 78    | 4196     | 4247   | 4297 | 4347 | 4397               | 4447 | 4497 | 4547     | 4597 | 4647    |        |
| 79    | 4697     | 4747   | 4797 | 4847 | 4897               | 4947 | 4997 | 5047     | 5097 | 5147    |        |
| 8680  | 938 5197 | 5247   | 5297 | 5347 | 5397               | 5447 | 5497 | 5547     | 5598 | 5648    |        |
| 81    | 5698     | 5748   | 5798 | 5848 | 5898               | 5948 | 5998 | 6048     | 6098 | 6148    | 49     |
| 82    | 6198     | 6248   | 6298 | 6348 | 6398               | 6448 | 6498 | 6548     | 6598 | 6648    | 1 4.9  |
| 83    | 6698     | 6748   | 6798 | 6848 | 6898               | 6948 | 6998 | 7048     | 7098 | 7148    | 2 9.8  |
| 84    | 7198     | 7248   | 7298 | 7348 | 7398               | 7448 | 7498 | 7548     | 7598 | 7648    | 3 14.7 |
| 85    | 7698     | 7748   | 7798 | 7848 | 7898               | 7948 | 7998 | 8048     | 8098 | 8148    | 4 19.6 |
| 86    | 8198     | 8248   | 8298 | 8348 | 8398               | 8448 | 8498 | 8548     | 8598 | 8648    | 5 24.5 |
| 87    | 8698     | 8748   | 8798 | 8848 | 8898               | 8948 | 8998 | 9048     | 9098 | 9148    | 6 29.4 |
| 88    | 9198     | 9248   | 9298 | 9348 | 9398               | 9448 | 9498 | 9548     | 9598 | 9648    | 7 34.3 |
| 89    | 9698     | 9748   | 9798 | 9848 | 9898               | 9948 | 9998 | 0048     | 0098 | 0148    | 8 39.2 |
| 8690  | 939 0198 | 0248   | 0298 | 0348 | 0398               | 0448 | 0498 | 0548     | 0598 | 0648    | 9 44.1 |
| 91    | 0697     | 0747   | 0797 | 0847 | 0897               | 0947 | 0997 | 1047     | 1097 | 1147    |        |
| 92    | 1197     | 1247   | 1297 | 1347 | 1397               | 1447 | 1497 | 1547     | 1597 | 1647    |        |
| 93    | 1697     | 1747   | 1797 | 1847 | 1897               | 1947 | 1997 | 2046     | 2096 | 2146    |        |
| 94    | 2196     | 2246   | 2296 | 2346 | 2396               | 2446 | 2496 | 2546     | 2596 | 2646    |        |
| 95    | 2696     | 2746   | 2796 | 2846 | 2896               | 2946 | 2996 | 3045     | 3095 | 3145    |        |
| 96    | 3195     | 3245   | 3295 | 3345 | 3395               | 3445 | 3495 | 3545     | 3595 | 3645    |        |
| 97    | 3695     | 3745   | 3795 | 3845 | 3894               | 3944 | 3994 | 4044     | 4094 | 4144    |        |
| 98    | 4194     | 4244   | 4294 | 4344 | 4394               | 4444 | 4494 | 4544     | 4593 | 4643    |        |
| 99    | 4693     | 4743   | 4793 | 4843 | 4893               | 4943 | 4993 | 5043     | 5093 | 5143    |        |
| 8700  | 939 5193 | 5242   | 5292 | 5342 | 5392               | 5442 | 5492 | 5542     | 5592 | 5642    |        |
| N.    | 0        | 1      | 2    | 3    | 4                  | 5    | 6    | 7        | 8    | 9       | P. P.  |
| 86500 | = 24     | 1' 40" |      |      | 8650' = 2° 24' 10" |      |      | S. 4.685 | 4476 | T. 8296 |        |
| 86600 | = 24     | 3 20   |      |      | 8660' = 2 24 20    |      |      |          | 4473 | 8302    |        |
| 86700 | = 24     | 5 0    |      |      | 8670' = 2 24 30    |      |      |          | 4470 | 8307    |        |
| 86800 | = 24     | 6 40   |      |      | 8680' = 2 24 40    |      |      |          | 4467 | 8313    |        |
| 86900 | = 24     | 8 20   |      |      | 8690' = 2 24 50    |      |      |          | 4464 | 8319    |        |



| N.    | 0        | 1    | 2    | 3    | 4     | 5     | 6     | 7     | 8     | 9     | P. P. |
|-------|----------|------|------|------|-------|-------|-------|-------|-------|-------|-------|
| 8700  | 939 5193 | 5243 | 5293 | 5343 | 5393  | 5443  | 5493  | 5543  | 5593  | 5643  |       |
| 01    | 5693     | 5743 | 5793 | 5843 | 5893  | 5943  | 5993  | 6043  | 6093  | 6143  |       |
| 02    | 6193     | 6243 | 6293 | 6343 | 6393  | 6443  | 6493  | 6543  | 6593  | 6643  |       |
| 03    | 6693     | 6743 | 6793 | 6843 | 6893  | 6943  | 6993  | 7043  | 7093  | 7143  |       |
| 04    | 7193     | 7243 | 7293 | 7343 | 7393  | 7443  | 7493  | 7543  | 7593  | 7643  |       |
| 05    | 7693     | 7743 | 7793 | 7843 | 7893  | 7943  | 7993  | 8043  | 8093  | 8143  |       |
| 06    | 8193     | 8243 | 8293 | 8343 | 8393  | 8443  | 8493  | 8543  | 8593  | 8643  |       |
| 07    | 8693     | 8743 | 8793 | 8843 | 8893  | 8943  | 8993  | 9043  | 9093  | 9143  |       |
| 08    | 9193     | 9243 | 9293 | 9343 | 9393  | 9443  | 9493  | 9543  | 9593  | 9643  |       |
| 09    | 9693     | 9743 | 9793 | 9843 | 9893  | 9943  | 9993  | 10043 | 10093 | 10143 |       |
| 8710  | 940 0183 | 0313 | 0363 | 0413 | 0463  | 0513  | 0563  | 0613  | 0663  | 0713  |       |
| 11    | 0863     | 0913 | 0963 | 1013 | 1063  | 1113  | 1163  | 1213  | 1263  | 1313  |       |
| 12    | 1313     | 1363 | 1413 | 1463 | 1513  | 1563  | 1613  | 1663  | 1713  | 1763  |       |
| 13    | 1813     | 1863 | 1913 | 1963 | 2013  | 2063  | 2113  | 2163  | 2213  | 2263  |       |
| 14    | 2313     | 2363 | 2413 | 2463 | 2513  | 2563  | 2613  | 2663  | 2713  | 2763  |       |
| 15    | 2813     | 2863 | 2913 | 2963 | 3013  | 3063  | 3113  | 3163  | 3213  | 3263  |       |
| 16    | 3313     | 3363 | 3413 | 3463 | 3513  | 3563  | 3613  | 3663  | 3713  | 3763  |       |
| 17    | 3813     | 3863 | 3913 | 3963 | 4013  | 4063  | 4113  | 4163  | 4213  | 4263  |       |
| 18    | 4313     | 4363 | 4413 | 4463 | 4513  | 4563  | 4613  | 4663  | 4713  | 4763  |       |
| 19    | 4813     | 4863 | 4913 | 4963 | 5013  | 5063  | 5113  | 5163  | 5213  | 5263  |       |
| 8720  | 940 5163 | 5313 | 5363 | 5413 | 5463  | 5513  | 5563  | 5613  | 5663  | 5713  |       |
| 21    | 5813     | 5863 | 5913 | 5963 | 6013  | 6063  | 6113  | 6163  | 6213  | 6263  |       |
| 22    | 6313     | 6363 | 6413 | 6463 | 6513  | 6563  | 6613  | 6663  | 6713  | 6763  |       |
| 23    | 6813     | 6863 | 6913 | 6963 | 7013  | 7063  | 7113  | 7163  | 7213  | 7263  |       |
| 24    | 7313     | 7363 | 7413 | 7463 | 7513  | 7563  | 7613  | 7663  | 7713  | 7763  |       |
| 25    | 7813     | 7863 | 7913 | 7963 | 8013  | 8063  | 8113  | 8163  | 8213  | 8263  |       |
| 26    | 8313     | 8363 | 8413 | 8463 | 8513  | 8563  | 8613  | 8663  | 8713  | 8763  |       |
| 27    | 8813     | 8863 | 8913 | 8963 | 9013  | 9063  | 9113  | 9163  | 9213  | 9263  |       |
| 28    | 9313     | 9363 | 9413 | 9463 | 9513  | 9563  | 9613  | 9663  | 9713  | 9763  |       |
| 29    | 9813     | 9863 | 9913 | 9963 | 10013 | 10063 | 10113 | 10163 | 10213 | 10263 |       |
| 8730  | 941 0143 | 0313 | 0363 | 0413 | 0463  | 0513  | 0563  | 0613  | 0663  | 0713  |       |
| 31    | 0863     | 0913 | 0963 | 1013 | 1063  | 1113  | 1163  | 1213  | 1263  | 1313  |       |
| 32    | 1313     | 1363 | 1413 | 1463 | 1513  | 1563  | 1613  | 1663  | 1713  | 1763  |       |
| 33    | 1813     | 1863 | 1913 | 1963 | 2013  | 2063  | 2113  | 2163  | 2213  | 2263  |       |
| 34    | 2313     | 2363 | 2413 | 2463 | 2513  | 2563  | 2613  | 2663  | 2713  | 2763  |       |
| 35    | 2813     | 2863 | 2913 | 2963 | 3013  | 3063  | 3113  | 3163  | 3213  | 3263  |       |
| 36    | 3313     | 3363 | 3413 | 3463 | 3513  | 3563  | 3613  | 3663  | 3713  | 3763  |       |
| 37    | 3813     | 3863 | 3913 | 3963 | 4013  | 4063  | 4113  | 4163  | 4213  | 4263  |       |
| 38    | 4313     | 4363 | 4413 | 4463 | 4513  | 4563  | 4613  | 4663  | 4713  | 4763  |       |
| 39    | 4813     | 4863 | 4913 | 4963 | 5013  | 5063  | 5113  | 5163  | 5213  | 5263  |       |
| 8740  | 941 5114 | 5164 | 5214 | 5264 | 5314  | 5364  | 5414  | 5464  | 5514  | 5564  |       |
| 41    | 5614     | 5664 | 5714 | 5764 | 5814  | 5864  | 5914  | 5964  | 6014  | 6064  |       |
| 42    | 6114     | 6164 | 6214 | 6264 | 6314  | 6364  | 6414  | 6464  | 6514  | 6564  |       |
| 43    | 6614     | 6664 | 6714 | 6764 | 6814  | 6864  | 6914  | 6964  | 7014  | 7064  |       |
| 44    | 7114     | 7164 | 7214 | 7264 | 7314  | 7364  | 7414  | 7464  | 7514  | 7564  |       |
| 45    | 7614     | 7664 | 7714 | 7764 | 7814  | 7864  | 7914  | 7964  | 8014  | 8064  |       |
| 46    | 8114     | 8164 | 8214 | 8264 | 8314  | 8364  | 8414  | 8464  | 8514  | 8564  |       |
| 47    | 8614     | 8664 | 8714 | 8764 | 8814  | 8864  | 8914  | 8964  | 9014  | 9064  |       |
| 48    | 9114     | 9164 | 9214 | 9264 | 9314  | 9364  | 9414  | 9464  | 9514  | 9564  |       |
| 49    | 9614     | 9664 | 9714 | 9764 | 9814  | 9864  | 9914  | 9964  | 10014 | 10064 |       |
| 8750  | 942 0081 | 0130 | 0180 | 0230 | 0280  | 0330  | 0380  | 0430  | 0480  | 0530  |       |
| N.    | 0        | 1    | 2    | 3    | 4     | 5     | 6     | 7     | 8     | 9     | P. P. |
| 87000 | 24 10 0  |      |      |      |       |       |       |       |       |       |       |
| 87100 | 24 11 40 |      |      |      |       |       |       |       |       |       |       |
| 87200 | 24 13 20 |      |      |      |       |       |       |       |       |       |       |
| 87300 | 24 15 0  |      |      |      |       |       |       |       |       |       |       |
| 87400 | 24 16 40 |      |      |      |       |       |       |       |       |       |       |



| N.    | 0             | 1    | 2    | 3    | 4    | 5            | 6    | 7    | 8        | 9    | P. P.   |
|-------|---------------|------|------|------|------|--------------|------|------|----------|------|---------|
| 8750  | 942 0081      | 0130 | 0180 | 0229 | 0279 | 0329         | 0378 | 0428 | 0478     | 0527 |         |
| 51    | 0577          | 0626 | 0676 | 0726 | 0775 | 0825         | 0875 | 0924 | 0974     | 1023 |         |
| 52    | 1073          | 1123 | 1172 | 1222 | 1272 | 1321         | 1371 | 1420 | 1470     | 1520 |         |
| 53    | 1569          | 1619 | 1669 | 1718 | 1768 | 1817         | 1867 | 1917 | 1966     | 2016 |         |
| 54    | 2065          | 2115 | 2165 | 2214 | 2264 | 2313         | 2363 | 2413 | 2462     | 2512 |         |
| 55    | 2562          | 2611 | 2661 | 2710 | 2760 | 2810         | 2859 | 2909 | 2958     | 3008 |         |
| 56    | 3058          | 3107 | 3157 | 3206 | 3256 | 3306         | 3355 | 3405 | 3454     | 3504 |         |
| 57    | 3553          | 3603 | 3653 | 3702 | 3752 | 3801         | 3851 | 3901 | 3950     | 4000 |         |
| 58    | 4049          | 4099 | 4149 | 4198 | 4248 | 4297         | 4347 | 4397 | 4446     | 4496 |         |
| 59    | 4545          | 4595 | 4644 | 4694 | 4744 | 4793         | 4843 | 4892 | 4942     | 4991 |         |
| 8760  | 942 5041      | 5091 | 5140 | 5190 | 5239 | 5289         | 5339 | 5388 | 5438     | 5487 |         |
| 61    | 5537          | 5586 | 5636 | 5686 | 5735 | 5785         | 5834 | 5884 | 5933     | 5983 | 50      |
| 62    | 6032          | 6082 | 6132 | 6181 | 6231 | 6280         | 6330 | 6379 | 6429     | 6479 | 1 5.0   |
| 63    | 6528          | 6578 | 6627 | 6677 | 6726 | 6776         | 6825 | 6875 | 6925     | 6974 | 2 10.0  |
| 64    | 7024          | 7073 | 7123 | 7172 | 7222 | 7271         | 7321 | 7371 | 7420     | 7470 | 3 15.0  |
| 65    | 7519          | 7569 | 7618 | 7668 | 7717 | 7767         | 7816 | 7866 | 7916     | 7965 | 4 20.0  |
| 66    | 8015          | 8064 | 8114 | 8163 | 8213 | 8262         | 8312 | 8361 | 8411     | 8461 | 5 25.0  |
| 67    | 8510          | 8560 | 8609 | 8659 | 8708 | 8758         | 8807 | 8857 | 8906     | 8956 | 6 30.0  |
| 68    | 9005          | 9055 | 9104 | 9154 | 9204 | 9253         | 9303 | 9352 | 9402     | 9451 | 7 35.0  |
| 69    | 9501          | 9550 | 9600 | 9649 | 9699 | 9748         | 9798 | 9847 | 9897     | 9946 | 8 40.0  |
| 8770  | 942 9996      | 0045 | 0095 | 0144 | 0194 | 0244         | 0293 | 0343 | 0392     | 0442 | 9 45.0  |
| 71    | 943 0491      | 0541 | 0590 | 0640 | 0689 | 0739         | 0788 | 0838 | 0887     | 0937 |         |
| 72    | 0986          | 1036 | 1085 | 1135 | 1184 | 1234         | 1283 | 1333 | 1382     | 1432 |         |
| 73    | 1481          | 1531 | 1580 | 1630 | 1679 | 1729         | 1778 | 1828 | 1877     | 1927 |         |
| 74    | 1976          | 2026 | 2075 | 2125 | 2174 | 2224         | 2273 | 2323 | 2372     | 2422 |         |
| 75    | 2471          | 2521 | 2570 | 2620 | 2669 | 2719         | 2768 | 2818 | 2867     | 2917 |         |
| 76    | 2966          | 3016 | 3065 | 3115 | 3164 | 3214         | 3263 | 3313 | 3362     | 3412 |         |
| 77    | 3461          | 3510 | 3560 | 3609 | 3659 | 3708         | 3758 | 3807 | 3857     | 3906 |         |
| 78    | 3956          | 4005 | 4055 | 4104 | 4154 | 4203         | 4253 | 4302 | 4352     | 4401 |         |
| 79    | 4450          | 4500 | 4549 | 4599 | 4648 | 4698         | 4747 | 4797 | 4846     | 4896 |         |
| 8780  | 943 4945      | 4995 | 5044 | 5094 | 5143 | 5192         | 5242 | 5291 | 5341     | 5390 |         |
| 81    | 5440          | 5489 | 5539 | 5588 | 5638 | 5687         | 5737 | 5786 | 5835     | 5885 | 49      |
| 82    | 5934          | 5984 | 6033 | 6083 | 6132 | 6182         | 6231 | 6280 | 6330     | 6379 | 1 4.9   |
| 83    | 6429          | 6478 | 6528 | 6577 | 6627 | 6676         | 6726 | 6775 | 6824     | 6874 | 2 9.8   |
| 84    | 6923          | 6973 | 7022 | 7072 | 7121 | 7170         | 7220 | 7269 | 7319     | 7368 | 3 14.7  |
| 85    | 7418          | 7467 | 7517 | 7566 | 7615 | 7665         | 7714 | 7764 | 7813     | 7863 | 4 19.6  |
| 86    | 7912          | 7961 | 8011 | 8060 | 8110 | 8159         | 8209 | 8258 | 8307     | 8357 | 5 24.5  |
| 87    | 8406          | 8456 | 8505 | 8555 | 8604 | 8653         | 8703 | 8752 | 8802     | 8851 | 6 29.4  |
| 88    | 8900          | 8950 | 8999 | 9049 | 9098 | 9148         | 9197 | 9246 | 9296     | 9345 | 7 34.3  |
| 89    | 9395          | 9444 | 9493 | 9543 | 9592 | 9642         | 9691 | 9741 | 9790     | 9839 | 8 39.2  |
| 8790  | 943 9889      | 9938 | 9988 | 0037 | 0086 | 0136         | 0185 | 0235 | 0284     | 0333 | 9 44.1  |
| 91    | 944 0383      | 0432 | 0482 | 0531 | 0580 | 0630         | 0679 | 0729 | 0778     | 0827 |         |
| 92    | 0877          | 0926 | 0976 | 1025 | 1074 | 1124         | 1173 | 1223 | 1272     | 1321 |         |
| 93    | 1371          | 1420 | 1470 | 1519 | 1568 | 1618         | 1667 | 1716 | 1766     | 1815 |         |
| 94    | 1865          | 1914 | 1963 | 2013 | 2062 | 2112         | 2161 | 2210 | 2260     | 2309 |         |
| 95    | 2358          | 2408 | 2457 | 2507 | 2556 | 2605         | 2655 | 2704 | 2753     | 2803 |         |
| 96    | 2852          | 2902 | 2951 | 3000 | 3050 | 3099         | 3148 | 3198 | 3247     | 3297 |         |
| 97    | 3346          | 3395 | 3445 | 3494 | 3543 | 3593         | 3642 | 3691 | 3741     | 3790 |         |
| 98    | 3840          | 3889 | 3938 | 3988 | 4037 | 4086         | 4136 | 4185 | 4234     | 4284 |         |
| 99    | 4333          | 4383 | 4432 | 4481 | 4531 | 4580         | 4629 | 4679 | 4728     | 4777 |         |
| 8800  | 944 4827      | 4876 | 4925 | 4975 | 5024 | 5073         | 5123 | 5172 | 5222     | 5271 |         |
| N.    | 0             | 1    | 2    | 3    | 4    | 5            | 6    | 7    | 8        | 9    | P. P.   |
| 87500 | = 24° 18' 20" |      |      |      | 8750 | = 2° 25' 50" |      |      | S. 4.685 | 4446 | T. 8355 |
| 87600 | = 24 20 0     |      |      |      | 8760 | = 2 26 0     |      |      |          | 4443 | 8361    |
| 87700 | = 24 21 40    |      |      |      | 8770 | = 2 26 10    |      |      |          | 4440 | 8367    |
| 87800 | = 24 23 20    |      |      |      | 8780 | = 2 26 20    |      |      |          | 4437 | 8373    |
| 87900 | = 24 25 0     |      |      |      | 8790 | = 2 26 30    |      |      |          | 4434 | 8379    |



| N.    | 0        | 1    | 2    | 3    | 4    | 5    | 6     | 7     | 8     | 9     | P. P. |
|-------|----------|------|------|------|------|------|-------|-------|-------|-------|-------|
| 8800  | 944 4827 | 4876 | 4925 | 4975 | 5024 | 5073 | 5122  | 5171  | 5220  | 5269  |       |
| 01    | 5320     | 5370 | 5419 | 5468 | 5517 | 5566 | 5615  | 5664  | 5713  | 5762  |       |
| 02    | 5811     | 5861 | 5910 | 5959 | 6008 | 6057 | 6106  | 6155  | 6204  | 6253  |       |
| 03    | 6302     | 6351 | 6400 | 6449 | 6498 | 6547 | 6596  | 6645  | 6694  | 6743  |       |
| 04    | 6800     | 6850 | 6899 | 6948 | 6997 | 7046 | 7095  | 7144  | 7193  | 7242  |       |
| 05    | 7291     | 7341 | 7390 | 7439 | 7488 | 7537 | 7586  | 7635  | 7684  | 7733  |       |
| 06    | 7782     | 7831 | 7880 | 7929 | 7978 | 8027 | 8076  | 8125  | 8174  | 8223  |       |
| 07    | 8272     | 8321 | 8370 | 8419 | 8468 | 8517 | 8566  | 8615  | 8664  | 8713  |       |
| 08    | 8762     | 8811 | 8860 | 8909 | 8958 | 9007 | 9056  | 9105  | 9154  | 9203  |       |
| 09    | 9252     | 9301 | 9350 | 9399 | 9448 | 9497 | 9546  | 9595  | 9644  | 9693  |       |
| 8810  | 9742     | 9791 | 9840 | 9889 | 9938 | 9987 | 10000 | 10000 | 10000 | 10000 |       |
| 11    | 945 0254 | 0303 | 0352 | 0401 | 0450 | 0499 | 0548  | 0597  | 0646  | 0695  |       |
| 12    | 0744     | 0793 | 0842 | 0891 | 0940 | 0989 | 1038  | 1087  | 1136  | 1185  |       |
| 13    | 1234     | 1283 | 1332 | 1381 | 1430 | 1479 | 1528  | 1577  | 1626  | 1675  |       |
| 14    | 1724     | 1773 | 1822 | 1871 | 1920 | 1969 | 2018  | 2067  | 2116  | 2165  |       |
| 15    | 2214     | 2263 | 2312 | 2361 | 2410 | 2459 | 2508  | 2557  | 2606  | 2655  |       |
| 16    | 2704     | 2753 | 2802 | 2851 | 2900 | 2949 | 2998  | 3047  | 3096  | 3145  |       |
| 17    | 3204     | 3253 | 3302 | 3351 | 3400 | 3449 | 3498  | 3547  | 3596  | 3645  |       |
| 18    | 3704     | 3753 | 3802 | 3851 | 3900 | 3949 | 3998  | 4047  | 4096  | 4145  |       |
| 19    | 4204     | 4253 | 4302 | 4351 | 4400 | 4449 | 4498  | 4547  | 4596  | 4645  |       |
| 8820  | 945 4686 | 4735 | 4784 | 4833 | 4882 | 4931 | 4980  | 5029  | 5078  | 5127  |       |
| 21    | 5176     | 5225 | 5274 | 5323 | 5372 | 5421 | 5470  | 5519  | 5568  | 5617  |       |
| 22    | 5666     | 5715 | 5764 | 5813 | 5862 | 5911 | 5960  | 6009  | 6058  | 6107  |       |
| 23    | 6156     | 6205 | 6254 | 6303 | 6352 | 6401 | 6450  | 6499  | 6548  | 6597  |       |
| 24    | 6646     | 6695 | 6744 | 6793 | 6842 | 6891 | 6940  | 6989  | 7038  | 7087  |       |
| 25    | 7136     | 7185 | 7234 | 7283 | 7332 | 7381 | 7430  | 7479  | 7528  | 7577  |       |
| 26    | 7626     | 7675 | 7724 | 7773 | 7822 | 7871 | 7920  | 7969  | 8018  | 8067  |       |
| 27    | 8116     | 8165 | 8214 | 8263 | 8312 | 8361 | 8410  | 8459  | 8508  | 8557  |       |
| 28    | 8606     | 8655 | 8704 | 8753 | 8802 | 8851 | 8900  | 8949  | 8998  | 9047  |       |
| 29    | 9096     | 9145 | 9194 | 9243 | 9292 | 9341 | 9390  | 9439  | 9488  | 9537  |       |
| 8830  | 945 9607 | 9656 | 9705 | 9754 | 9803 | 9852 | 9901  | 9950  | 10000 | 10000 |       |
| 31    | 946 0009 | 0148 | 0287 | 0426 | 0565 | 0704 | 0843  | 0982  | 1121  | 1260  |       |
| 32    | 0391     | 0530 | 0669 | 0808 | 0947 | 1086 | 1225  | 1364  | 1503  | 1642  |       |
| 33    | 1081     | 1220 | 1359 | 1498 | 1637 | 1776 | 1915  | 2054  | 2193  | 2332  |       |
| 34    | 2371     | 2510 | 2649 | 2788 | 2927 | 3066 | 3205  | 3344  | 3483  | 3622  |       |
| 35    | 3661     | 3800 | 3939 | 4078 | 4217 | 4356 | 4495  | 4634  | 4773  | 4912  |       |
| 36    | 4951     | 5090 | 5229 | 5368 | 5507 | 5646 | 5785  | 5924  | 6063  | 6202  |       |
| 37    | 6241     | 6380 | 6519 | 6658 | 6797 | 6936 | 7075  | 7214  | 7353  | 7492  |       |
| 38    | 7531     | 7670 | 7809 | 7948 | 8087 | 8226 | 8365  | 8504  | 8643  | 8782  |       |
| 39    | 8821     | 8960 | 9099 | 9238 | 9377 | 9516 | 9655  | 9794  | 9933  | 10000 |       |
| 8840  | 946 4523 | 4572 | 4621 | 4670 | 4719 | 4768 | 4817  | 4866  | 4915  | 4964  |       |
| 41    | 5013     | 5062 | 5111 | 5160 | 5209 | 5258 | 5307  | 5356  | 5405  | 5454  |       |
| 42    | 5503     | 5552 | 5601 | 5650 | 5699 | 5748 | 5797  | 5846  | 5895  | 5944  |       |
| 43    | 5993     | 6042 | 6091 | 6140 | 6189 | 6238 | 6287  | 6336  | 6385  | 6434  |       |
| 44    | 6483     | 6532 | 6581 | 6630 | 6679 | 6728 | 6777  | 6826  | 6875  | 6924  |       |
| 45    | 6973     | 7022 | 7071 | 7120 | 7169 | 7218 | 7267  | 7316  | 7365  | 7414  |       |
| 46    | 7463     | 7512 | 7561 | 7610 | 7659 | 7708 | 7757  | 7806  | 7855  | 7904  |       |
| 47    | 7953     | 8002 | 8051 | 8100 | 8149 | 8198 | 8247  | 8296  | 8345  | 8394  |       |
| 48    | 8443     | 8492 | 8541 | 8590 | 8639 | 8688 | 8737  | 8786  | 8835  | 8884  |       |
| 49    | 8933     | 8982 | 9031 | 9080 | 9129 | 9178 | 9227  | 9276  | 9325  | 9374  |       |
| 8850  | 946 9433 | 9482 | 9531 | 9580 | 9629 | 9678 | 9727  | 9776  | 9825  | 9874  |       |
| N.    | 0        | 1    | 2    | 3    | 4    | 5    | 6     | 7     | 8     | 9     | P. P. |
| 88000 | 24       | 26   | 40   | 55   | 70   | 85   | 100   | 115   | 130   | 145   |       |
| 88100 | 24       | 28   | 43   | 58   | 73   | 88   | 103   | 118   | 133   | 148   |       |
| 88200 | 24       | 30   | 45   | 60   | 75   | 90   | 105   | 120   | 135   | 150   |       |
| 88300 | 24       | 31   | 46   | 61   | 76   | 91   | 106   | 121   | 136   | 151   |       |
| 88400 | 24       | 33   | 48   | 63   | 78   | 93   | 108   | 123   | 138   | 153   |       |



| N.   | 0                   | 1    | 2    | 3    | 4                   | 5        | 6    | 7    | 8       | 9    | P. P.  |
|------|---------------------|------|------|------|---------------------|----------|------|------|---------|------|--------|
| 8850 | 946 9433            | 9482 | 9531 | 9580 | 9629                | 9678     | 9727 | 9776 | 9825    | 9874 |        |
| 51   | 9923                | 9972 | 0022 | 0071 | 0120                | 0169     | 0218 | 0267 | 0316    | 0365 |        |
| 52   | 947 0414            | 0463 | 0512 | 0561 | 0610                | 0659     | 0708 | 0757 | 0807    | 0856 |        |
| 53   | 0905                | 0954 | 1003 | 1052 | 1101                | 1150     | 1199 | 1248 | 1297    | 1346 |        |
| 54   | 1395                | 1444 | 1493 | 1542 | 1591                | 1640     | 1689 | 1739 | 1788    | 1837 |        |
| 55   | 1886                | 1935 | 1984 | 2033 | 2082                | 2131     | 2180 | 2229 | 2278    | 2327 |        |
| 56   | 2376                | 2425 | 2474 | 2523 | 2572                | 2621     | 2670 | 2719 | 2768    | 2817 |        |
| 57   | 2866                | 2915 | 2965 | 3014 | 3063                | 3112     | 3161 | 3210 | 3259    | 3308 |        |
| 58   | 3357                | 3406 | 3455 | 3504 | 3553                | 3602     | 3651 | 3700 | 3749    | 3798 |        |
| 59   | 3847                | 3896 | 3945 | 3994 | 4043                | 4092     | 4141 | 4190 | 4239    | 4288 |        |
| 8860 | 947 4337            | 4386 | 4435 | 4484 | 4533                | 4582     | 4631 | 4680 | 4729    | 4778 |        |
| 61   | 4827                | 4876 | 4925 | 4974 | 5023                | 5072     | 5121 | 5170 | 5219    | 5268 | 49     |
| 62   | 5317                | 5366 | 5415 | 5464 | 5513                | 5562     | 5611 | 5660 | 5709    | 5758 | 1 4.9  |
| 63   | 5807                | 5856 | 5905 | 5954 | 6003                | 6052     | 6101 | 6150 | 6199    | 6248 | 2 9.8  |
| 64   | 6297                | 6346 | 6395 | 6444 | 6493                | 6542     | 6591 | 6640 | 6689    | 6738 | 3 14.7 |
| 65   | 6787                | 6836 | 6885 | 6934 | 6983                | 7032     | 7081 | 7130 | 7179    | 7228 | 4 19.6 |
| 66   | 7277                | 7326 | 7375 | 7424 | 7473                | 7522     | 7571 | 7620 | 7669    | 7718 | 5 24.5 |
| 67   | 7767                | 7816 | 7865 | 7914 | 7963                | 8012     | 8061 | 8110 | 8159    | 8208 | 6 29.4 |
| 68   | 8257                | 8306 | 8355 | 8404 | 8453                | 8502     | 8551 | 8600 | 8649    | 8698 | 7 34.3 |
| 69   | 8747                | 8796 | 8844 | 8893 | 8942                | 8991     | 9040 | 9089 | 9138    | 9187 | 8 39.2 |
| 8870 | 947 9236            | 9285 | 9334 | 9383 | 9432                | 9481     | 9530 | 9579 | 9628    | 9677 | 9 44.1 |
| 71   | 9726                | 9775 | 9824 | 9873 | 9922                | 9971     | 0020 | 0068 | 0117    | 0166 |        |
| 72   | 948 0215            | 0264 | 0313 | 0362 | 0411                | 0460     | 0509 | 0558 | 0607    | 0656 |        |
| 73   | 0705                | 0754 | 0803 | 0852 | 0901                | 0950     | 0998 | 1047 | 1096    | 1145 |        |
| 74   | 1194                | 1243 | 1292 | 1341 | 1390                | 1439     | 1488 | 1537 | 1586    | 1635 |        |
| 75   | 1684                | 1733 | 1781 | 1830 | 1879                | 1928     | 1977 | 2026 | 2075    | 2124 |        |
| 76   | 2173                | 2222 | 2271 | 2320 | 2369                | 2418     | 2467 | 2515 | 2564    | 2613 |        |
| 77   | 2662                | 2711 | 2760 | 2809 | 2858                | 2907     | 2956 | 3005 | 3054    | 3102 |        |
| 78   | 3151                | 3200 | 3249 | 3298 | 3347                | 3396     | 3445 | 3494 | 3543    | 3592 |        |
| 79   | 3641                | 3689 | 3738 | 3787 | 3836                | 3885     | 3934 | 3983 | 4032    | 4081 |        |
| 8880 | 948 4130            | 4179 | 4227 | 4276 | 4325                | 4374     | 4423 | 4472 | 4521    | 4570 |        |
| 81   | 4619                | 4668 | 4717 | 4765 | 4814                | 4863     | 4912 | 4961 | 5010    | 5059 | 48     |
| 82   | 5108                | 5157 | 5205 | 5254 | 5303                | 5352     | 5401 | 5450 | 5499    | 5548 | 1 4.8  |
| 83   | 5597                | 5646 | 5694 | 5743 | 5792                | 5841     | 5890 | 5939 | 5988    | 6037 | 2 9.6  |
| 84   | 6085                | 6134 | 6183 | 6232 | 6281                | 6330     | 6379 | 6428 | 6477    | 6525 | 3 14.4 |
| 85   | 6574                | 6623 | 6672 | 6721 | 6770                | 6819     | 6868 | 6916 | 6965    | 7014 | 4 19.2 |
| 86   | 7063                | 7112 | 7161 | 7210 | 7259                | 7307     | 7356 | 7405 | 7454    | 7503 | 5 24.0 |
| 87   | 7552                | 7601 | 7650 | 7698 | 7747                | 7796     | 7845 | 7894 | 7943    | 7992 | 6 28.8 |
| 88   | 8040                | 8089 | 8138 | 8187 | 8236                | 8285     | 8334 | 8382 | 8431    | 8480 | 7 33.6 |
| 89   | 8529                | 8578 | 8627 | 8676 | 8724                | 8773     | 8822 | 8871 | 8920    | 8969 | 8 38.4 |
| 8890 | 948 9018            | 9066 | 9115 | 9164 | 9213                | 9262     | 9311 | 9360 | 9408    | 9457 | 9 43.2 |
| 91   | 9506                | 9555 | 9604 | 9653 | 9701                | 9750     | 9799 | 9848 | 9897    | 9946 |        |
| 92   | 9995                | 0043 | 0092 | 0141 | 0190                | 0239     | 0288 | 0336 | 0385    | 0434 |        |
| 93   | 949 0483            | 0532 | 0581 | 0629 | 0678                | 0727     | 0776 | 0825 | 0874    | 0922 |        |
| 94   | 0971                | 1020 | 1069 | 1118 | 1167                | 1215     | 1264 | 1313 | 1362    | 1411 |        |
| 95   | 1460                | 1508 | 1557 | 1606 | 1655                | 1704     | 1752 | 1801 | 1850    | 1899 |        |
| 96   | 1948                | 1997 | 2045 | 2094 | 2143                | 2192     | 2241 | 2289 | 2338    | 2387 |        |
| 97   | 2436                | 2485 | 2534 | 2582 | 2631                | 2680     | 2729 | 2778 | 2826    | 2875 |        |
| 98   | 2924                | 2973 | 3022 | 3070 | 3119                | 3168     | 3217 | 3266 | 3314    | 3363 |        |
| 99   | 3412                | 3461 | 3510 | 3558 | 3607                | 3656     | 3705 | 3754 | 3802    | 3851 |        |
| 8900 | 949 3900            | 3949 | 3998 | 4046 | 4095                | 4144     | 4193 | 4242 | 4290    | 4339 |        |
| N.   | 0                   | 1    | 2    | 3    | 4                   | 5        | 6    | 7    | 8       | 9    | P. P.  |
|      | 88500" = 24° 35' 0" |      |      |      | 88500" = 2° 27' 30" | S. 4.685 | 4416 |      | T. 8415 |      |        |
|      | 88600" = 24 36 40   |      |      |      | 88600" = 2 27 40    |          | 4413 |      | 8421    |      |        |
|      | 88700" = 24 38 20   |      |      |      | 88700" = 2 27 50    |          | 4410 |      | 8427    |      |        |
|      | 88800" = 24 40 0    |      |      |      | 88800" = 2 28 0     |          | 4407 |      | 8433    |      |        |
|      | 88900" = 24 41 40   |      |      |      | 88900" = 2 28 10    |          | 4404 |      | 8439    |      |        |



| N.    | 0        | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     | P. P. |
|-------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 8900  | 949 3950 | 3949  | 3998  | 4046  | 4095  | 4143  | 4192  | 4240  | 4289  | 4337  |       |
| 01    | 4388     | 4437  | 4486  | 4534  | 4583  | 4631  | 4680  | 4728  | 4777  | 4825  |       |
| 02    | 4876     | 4925  | 4973  | 5022  | 5070  | 5119  | 5167  | 5216  | 5264  | 5313  |       |
| 03    | 5361     | 5410  | 5458  | 5507  | 5555  | 5604  | 5652  | 5701  | 5749  | 5798  |       |
| 04    | 5852     | 5900  | 5949  | 5997  | 6046  | 6094  | 6143  | 6191  | 6240  | 6288  |       |
| 05    | 6339     | 6388  | 6437  | 6485  | 6534  | 6582  | 6631  | 6679  | 6728  | 6776  |       |
| 06    | 6827     | 6876  | 6924  | 6973  | 7021  | 7070  | 7118  | 7167  | 7215  | 7264  |       |
| 07    | 7315     | 7363  | 7412  | 7460  | 7509  | 7557  | 7606  | 7654  | 7703  | 7751  |       |
| 08    | 7802     | 7851  | 7900  | 7948  | 7997  | 8045  | 8094  | 8142  | 8191  | 8239  |       |
| 09    | 8290     | 8338  | 8387  | 8435  | 8484  | 8532  | 8581  | 8629  | 8678  | 8726  |       |
| 8910  | 949 8777 | 8826  | 8875  | 8923  | 8972  | 9020  | 9069  | 9117  | 9166  | 9214  |       |
| 11    | 9263     | 9312  | 9360  | 9409  | 9457  | 9506  | 9554  | 9603  | 9651  | 9700  | 49    |
| 12    | 9752     | 9801  | 9849  | 9898  | 9946  | 9995  | 10043 | 10092 | 10140 | 10189 | 49    |
| 13    | 950 0339 | 0388  | 0437  | 0485  | 0534  | 0582  | 0631  | 0679  | 0728  | 0776  | 49    |
| 14    | 0827     | 0875  | 0924  | 0972  | 1021  | 1069  | 1118  | 1166  | 1215  | 1263  | 49    |
| 15    | 1313     | 1362  | 1410  | 1459  | 1507  | 1556  | 1604  | 1653  | 1701  | 1750  | 49    |
| 16    | 1799     | 1848  | 1896  | 1945  | 1993  | 2042  | 2090  | 2139  | 2187  | 2236  | 49    |
| 17    | 2285     | 2334  | 2382  | 2431  | 2479  | 2528  | 2576  | 2625  | 2673  | 2722  | 49    |
| 18    | 2770     | 2819  | 2867  | 2916  | 2964  | 3013  | 3061  | 3110  | 3158  | 3207  | 49    |
| 19    | 3256     | 3304  | 3353  | 3401  | 3450  | 3498  | 3547  | 3595  | 3644  | 3692  | 49    |
| 8920  | 950 3649 | 3697  | 3746  | 3794  | 3843  | 3891  | 3940  | 3988  | 4037  | 4085  |       |
| 21    | 4135     | 4183  | 4232  | 4280  | 4329  | 4377  | 4426  | 4474  | 4523  | 4571  |       |
| 22    | 4620     | 4669  | 4717  | 4766  | 4814  | 4863  | 4911  | 4960  | 5008  | 5057  |       |
| 23    | 5105     | 5154  | 5202  | 5251  | 5299  | 5348  | 5396  | 5445  | 5493  | 5542  |       |
| 24    | 5590     | 5639  | 5687  | 5736  | 5784  | 5833  | 5881  | 5930  | 5978  | 6027  |       |
| 25    | 6075     | 6124  | 6172  | 6221  | 6269  | 6318  | 6366  | 6415  | 6463  | 6512  |       |
| 26    | 6560     | 6608  | 6657  | 6705  | 6754  | 6802  | 6851  | 6899  | 6948  | 6996  |       |
| 27    | 7045     | 7093  | 7142  | 7190  | 7239  | 7287  | 7336  | 7384  | 7433  | 7481  |       |
| 28    | 7529     | 7578  | 7626  | 7675  | 7723  | 7772  | 7820  | 7869  | 7917  | 7966  |       |
| 29    | 8014     | 8063  | 8111  | 8160  | 8208  | 8257  | 8305  | 8354  | 8402  | 8451  |       |
| 8930  | 950 8515 | 8563  | 8612  | 8660  | 8708  | 8757  | 8805  | 8854  | 8902  | 8950  |       |
| 31    | 9000     | 9048  | 9097  | 9145  | 9193  | 9242  | 9290  | 9338  | 9387  | 9435  | 48    |
| 32    | 9483     | 9531  | 9580  | 9628  | 9676  | 9725  | 9773  | 9821  | 9870  | 9918  | 48    |
| 33    | 9973     | 10021 | 10069 | 10117 | 10165 | 10214 | 10262 | 10310 | 10358 | 10407 | 48    |
| 34    | 951 0359 | 0408  | 0457  | 0505  | 0554  | 0602  | 0651  | 0699  | 0748  | 0796  | 48    |
| 35    | 0845     | 0894  | 0943  | 0991  | 1040  | 1088  | 1137  | 1185  | 1234  | 1282  | 48    |
| 36    | 1331     | 1380  | 1428  | 1477  | 1525  | 1574  | 1622  | 1671  | 1719  | 1768  | 48    |
| 37    | 1817     | 1866  | 1915  | 1963  | 2012  | 2060  | 2109  | 2157  | 2206  | 2254  | 48    |
| 38    | 2303     | 2352  | 2401  | 2449  | 2498  | 2546  | 2595  | 2643  | 2692  | 2740  | 48    |
| 39    | 2789     | 2838  | 2886  | 2935  | 2983  | 3032  | 3080  | 3129  | 3177  | 3226  | 48    |
| 8940  | 951 3375 | 3424  | 3472  | 3521  | 3569  | 3618  | 3666  | 3715  | 3763  | 3812  |       |
| 41    | 3861     | 3910  | 3958  | 4007  | 4055  | 4104  | 4152  | 4201  | 4249  | 4298  |       |
| 42    | 4347     | 4395  | 4444  | 4492  | 4541  | 4589  | 4638  | 4686  | 4735  | 4783  |       |
| 43    | 4832     | 4881  | 4929  | 4978  | 5027  | 5075  | 5124  | 5172  | 5221  | 5269  |       |
| 44    | 5318     | 5366  | 5415  | 5464  | 5512  | 5561  | 5609  | 5658  | 5706  | 5755  |       |
| 45    | 5803     | 5852  | 5901  | 5949  | 5998  | 6046  | 6095  | 6143  | 6192  | 6240  |       |
| 46    | 6289     | 6337  | 6386  | 6435  | 6483  | 6532  | 6580  | 6629  | 6677  | 6726  |       |
| 47    | 6774     | 6823  | 6871  | 6920  | 6968  | 7017  | 7066  | 7114  | 7163  | 7211  |       |
| 48    | 7260     | 7308  | 7357  | 7405  | 7454  | 7502  | 7551  | 7599  | 7648  | 7696  |       |
| 49    | 7745     | 7794  | 7842  | 7891  | 7939  | 7988  | 8036  | 8085  | 8133  | 8182  |       |
| 8950  | 951 8230 | 8279  | 8327  | 8376  | 8424  | 8473  | 8521  | 8570  | 8618  | 8667  |       |
| N.    | 0        | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     | P. P. |
| 89000 | 24       | 43    | 20    |       |       |       |       |       |       |       |       |
| 89100 | 24       | 45    | 0     |       |       |       |       |       |       |       |       |
| 89200 | 24       | 46    | 40    |       |       |       |       |       |       |       |       |
| 89300 | 24       | 48    | 20    |       |       |       |       |       |       |       |       |
| 89400 | 24       | 50    | 0     |       |       |       |       |       |       |       |       |
| 89000 | 24       | 43    | 20    |       |       |       |       |       |       |       |       |
| 89100 | 24       | 45    | 0     |       |       |       |       |       |       |       |       |
| 89200 | 24       | 46    | 40    |       |       |       |       |       |       |       |       |
| 89300 | 24       | 48    | 20    |       |       |       |       |       |       |       |       |
| 89400 | 24       | 50    | 0     |       |       |       |       |       |       |       |       |



| N.    | 0           | 1    | 2    | 3    | 4    | 5          | 6    | 7    | 8        | 9    | P. P.   |
|-------|-------------|------|------|------|------|------------|------|------|----------|------|---------|
| 8050  | 951 8230    | 8279 | 8327 | 8376 | 8424 | 8473       | 8521 | 8570 | 8619     | 8667 |         |
| 51    | 8716        | 8764 | 8813 | 8861 | 8910 | 8958       | 9007 | 9055 | 9104     | 9152 |         |
| 52    | 9201        | 9249 | 9298 | 9346 | 9395 | 9443       | 9492 | 9540 | 9589     | 9637 |         |
| 53    | 9686        | 9734 | 9783 | 9831 | 9880 | 9927       |      | 0025 | 0074     | 0122 |         |
| 54    | 952 0171    | 0219 | 0268 | 0316 | 0365 | 0413       | 0462 | 0510 | 0559     | 0607 |         |
| 55    | 0656        | 0704 | 0753 | 0801 | 0850 | 0898       | 0947 | 0995 | 1044     | 1092 |         |
| 56    | 1141        | 1189 | 1238 | 1286 | 1335 | 1383       | 1432 | 1480 | 1529     | 1577 |         |
| 57    | 1626        | 1674 | 1723 | 1771 | 1820 | 1868       | 1917 | 1965 | 2014     | 2062 |         |
| 58    | 2111        | 2159 | 2208 | 2256 | 2305 | 2353       | 2401 | 2450 | 2498     | 2547 |         |
| 59    | 2595        | 2644 | 2692 | 2741 | 2789 | 2838       | 2886 | 2935 | 2983     | 3032 |         |
| 8060  | 952 3080    | 3129 | 3177 | 3226 | 3274 | 3322       | 3371 | 3419 | 3468     | 3516 |         |
| 61    | 3565        | 3613 | 3662 | 3710 | 3759 | 3807       | 3856 | 3904 | 3952     | 4001 | 40      |
| 62    | 4049        | 4098 | 4146 | 4195 | 4243 | 4292       | 4340 | 4389 | 4437     | 4486 | 1 4.9   |
| 63    | 4534        | 4582 | 4631 | 4679 | 4728 | 4776       | 4825 | 4873 | 4922     | 4970 | 2 9.8   |
| 64    | 5018        | 5067 | 5115 | 5164 | 5212 | 5261       | 5309 | 5358 | 5406     | 5454 | 3 14.7  |
| 65    | 5503        | 5551 | 5600 | 5648 | 5697 | 5745       | 5793 | 5842 | 5890     | 5939 | 4 19.6  |
| 66    | 5987        | 6036 | 6084 | 6133 | 6181 | 6230       | 6278 | 6326 | 6375     | 6423 | 5 24.5  |
| 67    | 6472        | 6520 | 6569 | 6617 | 6665 | 6714       | 6762 | 6811 | 6859     | 6908 | 6 29.4  |
| 68    | 6956        | 7004 | 7053 | 7101 | 7150 | 7198       | 7247 | 7295 | 7343     | 7392 | 7 34.3  |
| 69    | 7440        | 7489 | 7537 | 7586 | 7634 | 7682       | 7731 | 7779 | 7828     | 7876 | 8 39.2  |
| 8070  | 952 7924    | 7973 | 8021 | 8070 | 8118 | 8167       | 8215 | 8264 | 8312     | 8360 | 9 44.1  |
| 71    | 8409        | 8457 | 8505 | 8554 | 8602 | 8651       | 8699 | 8747 | 8796     | 8844 |         |
| 72    | 8893        | 8941 | 8989 | 9038 | 9086 | 9135       | 9183 | 9231 | 9280     | 9328 |         |
| 73    | 9377        | 9425 | 9473 | 9522 | 9570 | 9619       | 9667 | 9715 | 9764     | 9812 |         |
| 74    | 9861        | 9909 | 9957 | 0006 | 0054 | 0103       | 0151 | 0199 | 0248     | 0296 |         |
| 75    | 953 0145    | 0193 | 0241 | 0290 | 0338 | 0387       | 0435 | 0483 | 0532     | 0580 |         |
| 76    | 0628        | 0677 | 0725 | 0774 | 0822 | 0870       | 0919 | 0967 | 1015     | 1064 |         |
| 77    | 1112        | 1161 | 1209 | 1257 | 1306 | 1354       | 1403 | 1451 | 1500     | 1548 |         |
| 78    | 1596        | 1644 | 1693 | 1741 | 1789 | 1838       | 1886 | 1935 | 1983     | 2032 |         |
| 79    | 2080        | 2128 | 2176 | 2225 | 2273 | 2322       | 2370 | 2418 | 2467     | 2515 |         |
| 8080  | 953 2763    | 2812 | 2860 | 2908 | 2957 | 3005       | 3054 | 3102 | 3150     | 3199 |         |
| 81    | 3247        | 3295 | 3344 | 3392 | 3441 | 3489       | 3537 | 3585 | 3634     | 3682 | 48      |
| 82    | 3731        | 3779 | 3827 | 3876 | 3924 | 3972       | 4021 | 4069 | 4117     | 4166 | 1 4.8   |
| 83    | 4214        | 4262 | 4311 | 4359 | 4407 | 4456       | 4504 | 4552 | 4601     | 4649 | 2 9.6   |
| 84    | 4697        | 4746 | 4794 | 4842 | 4891 | 4939       | 4987 | 5036 | 5084     | 5132 | 3 14.4  |
| 85    | 5181        | 5229 | 5277 | 5326 | 5374 | 5422       | 5471 | 5519 | 5567     | 5616 | 4 19.2  |
| 86    | 5664        | 5712 | 5761 | 5809 | 5857 | 5906       | 5954 | 6002 | 6051     | 6099 | 5 24.0  |
| 87    | 6147        | 6196 | 6244 | 6292 | 6341 | 6389       | 6437 | 6486 | 6534     | 6582 | 6 28.8  |
| 88    | 6631        | 6679 | 6727 | 6776 | 6824 | 6872       | 6921 | 6969 | 7017     | 7065 | 7 33.6  |
| 89    | 7114        | 7162 | 7210 | 7259 | 7307 | 7355       | 7404 | 7452 | 7500     | 7549 | 8 38.4  |
| 8090  | 953 7597    | 7645 | 7694 | 7742 | 7790 | 7838       | 7887 | 7935 | 7983     | 8032 | 9 43.2  |
| 91    | 8080        | 8128 | 8177 | 8225 | 8273 | 8321       | 8370 | 8418 | 8466     | 8515 |         |
| 92    | 8563        | 8611 | 8660 | 8708 | 8756 | 8804       | 8853 | 8901 | 8949     | 8998 |         |
| 93    | 9046        | 9094 | 9143 | 9191 | 9239 | 9287       | 9336 | 9384 | 9432     | 9481 |         |
| 94    | 9529        | 9577 | 9625 | 9674 | 9722 | 9770       | 9819 | 9867 | 9915     | 9963 |         |
| 95    | 954 0012    | 0060 | 0108 | 0157 | 0205 | 0253       | 0301 | 0350 | 0398     | 0446 |         |
| 96    | 0494        | 0543 | 0591 | 0639 | 0688 | 0736       | 0784 | 0832 | 0881     | 0929 |         |
| 97    | 0977        | 1025 | 1074 | 1122 | 1170 | 1219       | 1267 | 1315 | 1363     | 1412 |         |
| 98    | 1460        | 1508 | 1556 | 1605 | 1653 | 1701       | 1749 | 1798 | 1846     | 1894 |         |
| 99    | 1943        | 1991 | 2039 | 2087 | 2136 | 2184       | 2232 | 2280 | 2329     | 2377 |         |
| (XXX) | 954 2425    | 2473 | 2521 | 2570 | 2618 | 2666       | 2715 | 2763 | 2811     | 2859 |         |
| N.    | 0           | 1    | 2    | 3    | 4    | 5          | 6    | 7    | 8        | 9    | P. P.   |
| 8050  | 24° 51' 41" |      |      |      | 8050 | 2° 29' 10" |      |      | H. 4.685 | 4386 | T. 8475 |
| 8060  | 24 53 20    |      |      |      | 8060 | 2 29 30    |      |      |          | 4383 | 8462    |
| 8070  | 24 55 0     |      |      |      | 8070 | 2 29 30    |      |      |          | 4380 | 8488    |
| 8080  | 24 56 40    |      |      |      | 8080 | 2 29 40    |      |      |          | 4377 | 8494    |
| 8090  | 24 58 20    |      |      |      | 8090 | 2 29 50    |      |      |          | 4374 | 8500    |



| N.    | 0        | 1    | 2    | 3    | 4    | 5     | 6     | 7     | 8     | 9     | P. P. |
|-------|----------|------|------|------|------|-------|-------|-------|-------|-------|-------|
| 9000  | 954 2425 | 2473 | 2522 | 2570 | 2618 | 2666  | 2714  | 2763  | 2811  | 2859  |       |
| 01    | 2908     | 2956 | 3004 | 3052 | 3100 | 3148  | 3197  | 3245  | 3293  | 3341  |       |
| 02    | 3390     | 3438 | 3487 | 3535 | 3583 | 3631  | 3679  | 3728  | 3776  | 3824  |       |
| 03    | 3873     | 3921 | 3969 | 4017 | 4065 | 4113  | 4161  | 4210  | 4258  | 4307  |       |
| 04    | 4355     | 4403 | 4451 | 4500 | 4548 | 4596  | 4644  | 4693  | 4741  | 4789  |       |
| 05    | 4837     | 4885 | 4934 | 4982 | 5030 | 5078  | 5127  | 5175  | 5223  | 5271  |       |
| 06    | 5319     | 5368 | 5416 | 5464 | 5513 | 5561  | 5609  | 5658  | 5706  | 5754  |       |
| 07    | 5802     | 5850 | 5898 | 5946 | 5994 | 6043  | 6091  | 6139  | 6187  | 6235  |       |
| 08    | 6284     | 6332 | 6380 | 6428 | 6477 | 6525  | 6573  | 6621  | 6669  | 6717  |       |
| 09    | 6766     | 6814 | 6862 | 6910 | 6958 | 7007  | 7055  | 7103  | 7151  | 7199  |       |
| 9010  | 954 7248 | 7296 | 7344 | 7393 | 7441 | 7489  | 7537  | 7585  | 7634  | 7682  |       |
| 11    | 7730     | 7778 | 7826 | 7874 | 7923 | 7971  | 8019  | 8067  | 8115  | 8163  | 49    |
| 12    | 8212     | 8260 | 8308 | 8356 | 8404 | 8453  | 8501  | 8549  | 8597  | 8645  | 1 49  |
| 13    | 8694     | 8742 | 8790 | 8838 | 8886 | 8935  | 8983  | 9031  | 9079  | 9127  | 2 49  |
| 14    | 9176     | 9224 | 9272 | 9320 | 9368 | 9416  | 9465  | 9513  | 9561  | 9609  | 3 49  |
| 15    | 9657     | 9705 | 9754 | 9802 | 9850 | 9898  | 9946  | 9994  | 10032 | 10080 | 4 49  |
| 16    | 955 0139 | 0187 | 0235 | 0283 | 0331 | 0379  | 0427  | 0475  | 0523  | 0571  | 5 49  |
| 17    | 0620     | 0668 | 0717 | 0765 | 0813 | 0861  | 0909  | 0957  | 1005  | 1053  | 6 49  |
| 18    | 1102     | 1150 | 1199 | 1247 | 1295 | 1343  | 1391  | 1439  | 1487  | 1535  | 7 49  |
| 19    | 1584     | 1632 | 1680 | 1728 | 1776 | 1824  | 1872  | 1920  | 1968  | 2016  | 8 49  |
| 9020  | 955 2065 | 2114 | 2162 | 2210 | 2258 | 2306  | 2354  | 2402  | 2450  | 2498  | 9 49  |
| 21    | 2547     | 2595 | 2643 | 2691 | 2739 | 2787  | 2835  | 2883  | 2931  | 2979  |       |
| 22    | 3028     | 3076 | 3124 | 3172 | 3220 | 3268  | 3316  | 3364  | 3412  | 3460  |       |
| 23    | 3510     | 3558 | 3606 | 3654 | 3702 | 3750  | 3798  | 3846  | 3894  | 3942  |       |
| 24    | 3991     | 4039 | 4087 | 4135 | 4183 | 4231  | 4279  | 4327  | 4375  | 4423  |       |
| 25    | 4472     | 4520 | 4568 | 4616 | 4664 | 4712  | 4760  | 4808  | 4856  | 4904  |       |
| 26    | 4953     | 5001 | 5049 | 5097 | 5145 | 5193  | 5241  | 5289  | 5337  | 5385  |       |
| 27    | 5434     | 5482 | 5530 | 5578 | 5626 | 5674  | 5722  | 5770  | 5818  | 5866  |       |
| 28    | 5916     | 5964 | 6012 | 6060 | 6108 | 6156  | 6204  | 6252  | 6300  | 6348  |       |
| 29    | 6397     | 6445 | 6493 | 6541 | 6589 | 6637  | 6685  | 6733  | 6781  | 6829  |       |
| 9030  | 955 6873 | 6921 | 6974 | 7022 | 7070 | 7118  | 7166  | 7214  | 7262  | 7310  |       |
| 31    | 7358     | 7407 | 7455 | 7503 | 7551 | 7599  | 7647  | 7695  | 7743  | 7791  | 49    |
| 32    | 7839     | 7887 | 7935 | 7983 | 8031 | 8079  | 8127  | 8175  | 8223  | 8271  | 1 49  |
| 33    | 8320     | 8368 | 8416 | 8464 | 8512 | 8560  | 8608  | 8656  | 8704  | 8752  | 2 49  |
| 34    | 8801     | 8849 | 8897 | 8945 | 8993 | 9041  | 9089  | 9137  | 9185  | 9233  | 3 49  |
| 35    | 9282     | 9330 | 9378 | 9426 | 9474 | 9522  | 9570  | 9618  | 9666  | 9714  | 4 49  |
| 36    | 9764     | 9812 | 9860 | 9908 | 9956 | 10004 | 10052 | 10100 | 10148 | 10196 | 5 49  |
| 37    | 956 0243 | 0291 | 0339 | 0387 | 0435 | 0483  | 0531  | 0579  | 0627  | 0675  | 6 49  |
| 38    | 0723     | 0771 | 0819 | 0867 | 0915 | 0963  | 1011  | 1059  | 1107  | 1155  | 7 49  |
| 39    | 1204     | 1252 | 1300 | 1348 | 1396 | 1444  | 1492  | 1540  | 1588  | 1636  | 8 49  |
| 9040  | 956 1684 | 1732 | 1780 | 1828 | 1876 | 1924  | 1972  | 2020  | 2068  | 2116  |       |
| 41    | 2165     | 2213 | 2261 | 2309 | 2357 | 2405  | 2453  | 2501  | 2549  | 2597  |       |
| 42    | 2645     | 2693 | 2741 | 2789 | 2837 | 2885  | 2933  | 2981  | 3029  | 3077  |       |
| 43    | 3125     | 3173 | 3221 | 3269 | 3317 | 3365  | 3413  | 3461  | 3509  | 3557  |       |
| 44    | 3606     | 3654 | 3702 | 3750 | 3798 | 3846  | 3894  | 3942  | 3990  | 4038  |       |
| 45    | 4086     | 4134 | 4182 | 4230 | 4278 | 4326  | 4374  | 4422  | 4470  | 4518  |       |
| 46    | 4566     | 4614 | 4662 | 4710 | 4758 | 4806  | 4854  | 4902  | 4950  | 4998  |       |
| 47    | 5046     | 5094 | 5142 | 5190 | 5238 | 5286  | 5334  | 5382  | 5430  | 5478  |       |
| 48    | 5526     | 5574 | 5622 | 5670 | 5718 | 5766  | 5814  | 5862  | 5910  | 5958  |       |
| 49    | 6006     | 6054 | 6102 | 6150 | 6198 | 6246  | 6294  | 6342  | 6390  | 6438  |       |
| 9050  | 956 6486 | 6534 | 6582 | 6630 | 6678 | 6726  | 6774  | 6822  | 6870  | 6918  |       |
| N.    | 0        | 1    | 2    | 3    | 4    | 5     | 6     | 7     | 8     | 9     | P. P. |
| 90000 | 25       | 6    | 0    |      |      |       |       |       |       |       |       |
| 90100 | 25       | 1    | 40   |      |      |       |       |       |       |       |       |
| 90200 | 25       | 3    | 20   |      |      |       |       |       |       |       |       |
| 90300 | 25       | 5    | 0    |      |      |       |       |       |       |       |       |
| 90400 | 25       | 6    | 40   |      |      |       |       |       |       |       |       |
| 90000 | 25       | 6    | 0    |      |      |       |       |       |       |       |       |
| 90100 | 25       | 1    | 40   |      |      |       |       |       |       |       |       |
| 90200 | 25       | 3    | 20   |      |      |       |       |       |       |       |       |
| 90300 | 25       | 5    | 0    |      |      |       |       |       |       |       |       |
| 90400 | 25       | 6    | 40   |      |      |       |       |       |       |       |       |



| N.    | 0            | 1    | 2    | 3    | 4     | 5            | 6        | 7    | 8       | 9    | P. P.  |
|-------|--------------|------|------|------|-------|--------------|----------|------|---------|------|--------|
| 9050  | 956 6486     | 6534 | 6582 | 6630 | 6678  | 6726         | 6774     | 6822 | 6870    | 6918 |        |
| 51    | 6966         | 7014 | 7062 | 7110 | 7158  | 7206         | 7254     | 7302 | 7349    | 7397 |        |
| 52    | 7445         | 7493 | 7541 | 7589 | 7637  | 7685         | 7733     | 7781 | 7829    | 7877 |        |
| 53    | 7925         | 7973 | 8021 | 8069 | 8117  | 8165         | 8213     | 8261 | 8309    | 8357 |        |
| 54    | 8405         | 8453 | 8501 | 8549 | 8597  | 8645         | 8693     | 8741 | 8789    | 8837 |        |
| 55    | 8885         | 8933 | 8980 | 9028 | 9076  | 9124         | 9172     | 9220 | 9268    | 9316 |        |
| 56    | 9364         | 9412 | 9460 | 9508 | 9556  | 9604         | 9652     | 9700 | 9748    | 9796 |        |
| 57    | 9844         | 9892 | 9940 | 9988 | 0035  | 0083         | 0131     | 0179 | 0227    | 0275 |        |
| 58    | 957 0323     | 0371 | 0419 | 0467 | 0515  | 0563         | 0611     | 0659 | 0707    | 0755 |        |
| 59    | 0803         | 0851 | 0898 | 0946 | 0994  | 1042         | 1090     | 1138 | 1186    | 1234 |        |
| 9060  | 957 1282     | 1330 | 1378 | 1426 | 1474  | 1522         | 1570     | 1618 | 1665    | 1713 |        |
| 61    | 1761         | 1809 | 1857 | 1905 | 1953  | 2001         | 2049     | 2097 | 2145    | 2193 | 48     |
| 62    | 2241         | 2289 | 2336 | 2384 | 2432  | 2480         | 2528     | 2576 | 2624    | 2672 | 1 4.8  |
| 63    | 2720         | 2768 | 2816 | 2864 | 2911  | 2959         | 3007     | 3055 | 3103    | 3151 | 2 9.6  |
| 64    | 3199         | 3247 | 3295 | 3343 | 3391  | 3439         | 3486     | 3534 | 3582    | 3630 | 3 14.4 |
| 65    | 3678         | 3726 | 3774 | 3822 | 3870  | 3918         | 3966     | 4013 | 4061    | 4109 | 4 19.2 |
| 66    | 4157         | 4205 | 4253 | 4301 | 4349  | 4397         | 4445     | 4492 | 4540    | 4588 | 5 24.0 |
| 67    | 4636         | 4684 | 4732 | 4780 | 4828  | 4876         | 4924     | 4971 | 5019    | 5067 | 6 28.8 |
| 68    | 5115         | 5163 | 5211 | 5259 | 5307  | 5355         | 5402     | 5450 | 5498    | 5546 | 7 33.6 |
| 69    | 5594         | 5642 | 5690 | 5738 | 5786  | 5833         | 5881     | 5929 | 5977    | 6025 | 8 38.4 |
| 9070  | 957 6073     | 6121 | 6169 | 6217 | 6264  | 6312         | 6360     | 6408 | 6456    | 6504 | 9 43.2 |
| 71    | 6552         | 6600 | 6647 | 6695 | 6743  | 6791         | 6839     | 6887 | 6935    | 6983 |        |
| 72    | 7030         | 7078 | 7126 | 7174 | 7222  | 7270         | 7318     | 7366 | 7413    | 7461 |        |
| 73    | 7509         | 7557 | 7605 | 7653 | 7701  | 7748         | 7796     | 7844 | 7892    | 7940 |        |
| 74    | 7988         | 8036 | 8083 | 8131 | 8179  | 8227         | 8275     | 8323 | 8371    | 8418 |        |
| 75    | 8466         | 8514 | 8562 | 8610 | 8658  | 8706         | 8753     | 8801 | 8849    | 8897 |        |
| 76    | 8945         | 8993 | 9041 | 9088 | 9136  | 9184         | 9232     | 9280 | 9328    | 9376 |        |
| 77    | 9423         | 9471 | 9519 | 9567 | 9615  | 9663         | 9710     | 9758 | 9806    | 9854 |        |
| 78    | 9902         | 9950 | 9997 | 0045 | 0093  | 0141         | 0189     | 0237 | 0284    | 0332 |        |
| 79    | 958 0380     | 0428 | 0476 | 0524 | 0571  | 0619         | 0667     | 0715 | 0763    | 0811 |        |
| 9080  | 958 0858     | 0906 | 0954 | 1002 | 1050  | 1098         | 1145     | 1193 | 1241    | 1289 |        |
| 81    | 1337         | 1385 | 1432 | 1480 | 1528  | 1576         | 1624     | 1672 | 1719    | 1767 | 47     |
| 82    | 1815         | 1863 | 1911 | 1958 | 2006  | 2054         | 2102     | 2150 | 2198    | 2245 | 1 4.7  |
| 83    | 2293         | 2341 | 2389 | 2437 | 2484  | 2532         | 2580     | 2628 | 2676    | 2723 | 2 9.4  |
| 84    | 2771         | 2819 | 2867 | 2915 | 2962  | 3010         | 3058     | 3106 | 3154    | 3202 | 3 14.1 |
| 85    | 3249         | 3297 | 3345 | 3393 | 3441  | 3488         | 3536     | 3584 | 3632    | 3680 | 4 18.8 |
| 86    | 3727         | 3775 | 3823 | 3871 | 3919  | 3966         | 4014     | 4062 | 4110    | 4157 | 5 23.5 |
| 87    | 4205         | 4253 | 4301 | 4349 | 4396  | 4444         | 4492     | 4540 | 4588    | 4635 | 6 28.2 |
| 88    | 4683         | 4731 | 4779 | 4827 | 4874  | 4922         | 4970     | 5018 | 5065    | 5113 | 7 32.9 |
| 89    | 5161         | 5209 | 5257 | 5304 | 5352  | 5400         | 5448     | 5495 | 5543    | 5591 | 8 37.6 |
| 9090  | 958 5639     | 5687 | 5734 | 5782 | 5830  | 5878         | 5925     | 5973 | 6021    | 6069 | 9 42.3 |
| 91    | 6117         | 6164 | 6212 | 6260 | 6308  | 6355         | 6403     | 6451 | 6499    | 6547 |        |
| 92    | 6594         | 6642 | 6690 | 6738 | 6785  | 6833         | 6881     | 6929 | 6976    | 7024 |        |
| 93    | 7072         | 7120 | 7167 | 7215 | 7263  | 7311         | 7358     | 7406 | 7454    | 7502 |        |
| 94    | 7549         | 7597 | 7645 | 7693 | 7741  | 7788         | 7836     | 7884 | 7932    | 7979 |        |
| 95    | 8027         | 8075 | 8123 | 8170 | 8218  | 8266         | 8314     | 8361 | 8409    | 8457 |        |
| 96    | 8505         | 8552 | 8600 | 8648 | 8695  | 8743         | 8791     | 8839 | 8886    | 8934 |        |
| 97    | 8982         | 9030 | 9077 | 9125 | 9173  | 9221         | 9268     | 9316 | 9364    | 9412 |        |
| 98    | 9459         | 9507 | 9555 | 9603 | 9650  | 9698         | 9746     | 9793 | 9841    | 9889 |        |
| 99    | 9937         | 9984 | 0032 | 0080 | 0128  | 0175         | 0223     | 0271 | 0318    | 0366 |        |
| 9100  | 959 0414     | 0462 | 0509 | 0557 | 0605  | 0653         | 0700     | 0748 | 0796    | 0843 |        |
| N.    | 0            | 1    | 2    | 3    | 4     | 5            | 6        | 7    | 8       | 9    | P. P.  |
| 90500 | = 25° 8' 20" |      |      |      | 90500 | = 2° 30' 50" | S. 4.685 | 4355 | T. 8537 |      |        |
| 90600 | = 25 10 0    |      |      |      | 90600 | = 2 31 0     |          | 4352 | 8543    |      |        |
| 90700 | = 25 11 40   |      |      |      | 90700 | = 2 31 10    |          | 4349 | 8549    |      |        |
| 90800 | = 25 13 20   |      |      |      | 90800 | = 2 31 20    |          | 4346 | 8555    |      |        |
| 90900 | = 25 15 0    |      |      |      | 90900 | = 2 31 30    |          | 4343 | 8561    |      |        |



| N.   | 0           | 1    | 2    | 3    | 4    | 5       | 6        | 7    | 8    | 9    | P. P. |
|------|-------------|------|------|------|------|---------|----------|------|------|------|-------|
| 9100 | 959 6414    | 9461 | 9509 | 9557 | 9605 | 9653    | 9701     | 9749 | 9797 | 9845 |       |
| 01   | 0891        | 0939 | 0987 | 1034 | 1082 | 1130    | 1177     | 1225 | 1273 | 1321 |       |
| 02   | 1368        | 1416 | 1463 | 1511 | 1559 | 1607    | 1654     | 1702 | 1750 | 1798 |       |
| 03   | 1845        | 1893 | 1941 | 1989 | 2036 | 2084    | 2132     | 2180 | 2228 | 2276 |       |
| 04   | 2322        | 2370 | 2418 | 2466 | 2513 | 2561    | 2609     | 2657 | 2705 | 2753 |       |
| 05   | 2800        | 2847 | 2895 | 2943 | 2990 | 3038    | 3086     | 3134 | 3182 | 3230 |       |
| 06   | 3276        | 3324 | 3372 | 3420 | 3467 | 3515    | 3563     | 3611 | 3659 | 3707 |       |
| 07   | 3753        | 3801 | 3849 | 3896 | 3944 | 3992    | 4040     | 4088 | 4136 | 4184 |       |
| 08   | 4230        | 4278 | 4326 | 4374 | 4422 | 4469    | 4517     | 4565 | 4613 | 4661 |       |
| 09   | 4707        | 4755 | 4803 | 4850 | 4898 | 4946    | 4994     | 5042 | 5090 | 5138 |       |
| 9110 | 959 5184    | 5231 | 5279 | 5327 | 5375 | 5423    | 5471     | 5519 | 5567 | 5615 |       |
| 11   | 5660        | 5708 | 5756 | 5804 | 5852 | 5900    | 5948     | 5996 | 6044 | 6092 |       |
| 12   | 6137        | 6185 | 6233 | 6281 | 6329 | 6377    | 6425     | 6473 | 6521 | 6569 |       |
| 13   | 6614        | 6662 | 6710 | 6758 | 6806 | 6854    | 6902     | 6950 | 6998 | 7046 |       |
| 14   | 7090        | 7138 | 7186 | 7234 | 7282 | 7330    | 7378     | 7426 | 7474 | 7522 |       |
| 15   | 7567        | 7615 | 7663 | 7711 | 7759 | 7807    | 7855     | 7903 | 7951 | 7999 |       |
| 16   | 8043        | 8091 | 8139 | 8187 | 8235 | 8283    | 8331     | 8379 | 8427 | 8475 |       |
| 17   | 8520        | 8567 | 8615 | 8663 | 8711 | 8759    | 8807     | 8855 | 8903 | 8951 |       |
| 18   | 8996        | 9044 | 9092 | 9140 | 9188 | 9236    | 9284     | 9332 | 9380 | 9428 |       |
| 19   | 9474        | 9520 | 9567 | 9615 | 9663 | 9711    | 9759     | 9807 | 9855 | 9903 |       |
| 9120 | 959 9948    | 9996 | 6844 | 6892 | 6940 | 6988    | 7036     | 7084 | 7132 | 7180 |       |
| 21   | 960 0423    | 0472 | 0520 | 0567 | 0615 | 0663    | 0711     | 0759 | 0807 | 0855 |       |
| 22   | 0901        | 0948 | 0996 | 1044 | 1092 | 1140    | 1188     | 1236 | 1284 | 1332 |       |
| 23   | 1377        | 1424 | 1472 | 1520 | 1568 | 1616    | 1664     | 1712 | 1760 | 1808 |       |
| 24   | 1853        | 1901 | 1948 | 1996 | 2044 | 2092    | 2140     | 2188 | 2236 | 2284 |       |
| 25   | 2329        | 2376 | 2424 | 2472 | 2520 | 2568    | 2616     | 2664 | 2712 | 2760 |       |
| 26   | 2805        | 2852 | 2900 | 2947 | 2995 | 3043    | 3091     | 3139 | 3187 | 3235 |       |
| 27   | 3281        | 3328 | 3376 | 3423 | 3471 | 3519    | 3567     | 3615 | 3663 | 3711 |       |
| 28   | 3756        | 3804 | 3851 | 3899 | 3947 | 3995    | 4043     | 4091 | 4139 | 4187 |       |
| 29   | 4232        | 4279 | 4327 | 4375 | 4423 | 4471    | 4519     | 4567 | 4615 | 4663 |       |
| 9130 | 960 4708    | 4755 | 4803 | 4850 | 4898 | 4946    | 4994     | 5042 | 5090 | 5138 |       |
| 31   | 5183        | 5231 | 5279 | 5326 | 5374 | 5422    | 5470     | 5518 | 5566 | 5614 |       |
| 32   | 5659        | 5707 | 5754 | 5802 | 5850 | 5898    | 5946     | 5994 | 6042 | 6090 |       |
| 33   | 6135        | 6182 | 6230 | 6277 | 6325 | 6373    | 6421     | 6469 | 6517 | 6565 |       |
| 34   | 6610        | 6658 | 6705 | 6753 | 6801 | 6849    | 6897     | 6945 | 6993 | 7041 |       |
| 35   | 7086        | 7133 | 7181 | 7229 | 7277 | 7325    | 7373     | 7421 | 7469 | 7517 |       |
| 36   | 7561        | 7608 | 7656 | 7704 | 7751 | 7799    | 7847     | 7895 | 7943 | 7991 |       |
| 37   | 8016        | 8064 | 8111 | 8159 | 8206 | 8254    | 8301     | 8349 | 8397 | 8445 |       |
| 38   | 8511        | 8559 | 8607 | 8654 | 8702 | 8749    | 8797     | 8844 | 8892 | 8939 |       |
| 39   | 8987        | 9034 | 9082 | 9129 | 9177 | 9224    | 9272     | 9319 | 9367 | 9414 |       |
| 9140 | 960 9416    | 9509 | 9557 | 9605 | 9653 | 9701    | 9749     | 9797 | 9845 | 9893 |       |
| 41   | 9937        | 9985 | 6032 | 6080 | 6127 | 6175    | 6223     | 6271 | 6319 | 6367 |       |
| 42   | 961 0412    | 0460 | 0507 | 0555 | 0603 | 0651    | 0699     | 0747 | 0795 | 0843 |       |
| 43   | 0887        | 0935 | 0982 | 1030 | 1077 | 1125    | 1173     | 1221 | 1269 | 1317 |       |
| 44   | 1362        | 1410 | 1457 | 1505 | 1553 | 1601    | 1649     | 1697 | 1745 | 1793 |       |
| 45   | 1837        | 1885 | 1932 | 1980 | 2027 | 2075    | 2123     | 2171 | 2219 | 2267 |       |
| 46   | 2312        | 2359 | 2407 | 2454 | 2502 | 2549    | 2597     | 2645 | 2693 | 2741 |       |
| 47   | 2787        | 2834 | 2882 | 2929 | 2977 | 3024    | 3072     | 3119 | 3167 | 3214 |       |
| 48   | 3262        | 3309 | 3357 | 3404 | 3451 | 3499    | 3546     | 3594 | 3642 | 3689 |       |
| 49   | 3736        | 3784 | 3831 | 3879 | 3926 | 3974    | 4021     | 4069 | 4117 | 4165 |       |
| 9150 | 961 4211    | 4258 | 4306 | 4353 | 4401 | 4448    | 4496     | 4543 | 4591 | 4638 |       |
| N.   | 0           | 1    | 2    | 3    | 4    | 5       | 6        | 7    | 8    | 9    | P. P. |
| 9100 | 25° 16' 40" |      |      |      |      |         |          |      |      |      |       |
| 9110 | 25 18 20    |      |      |      | 9100 | 2 31 40 | 25 46 45 | 4114 | 4114 | 4114 |       |
| 9120 | 25 20 0     |      |      |      | 9130 | 2 32 0  |          | 4117 | 4117 | 4117 |       |
| 9130 | 25 21 40    |      |      |      | 9140 | 2 32 10 |          | 4120 | 4120 | 4120 |       |
| 9140 | 25 23 20    |      |      |      |      |         |          | 4127 | 4127 | 4127 |       |



| N.    | 0            | 1    | 2    | 3     | 4            | 5    | 6    | 7        | 8    | 9       | P. P.  |
|-------|--------------|------|------|-------|--------------|------|------|----------|------|---------|--------|
| 9150  | 961 4211     | 4258 | 4306 | 4353  | 4401         | 4448 | 4496 | 4543     | 4591 | 4638    |        |
| 51    | 4686         | 4733 | 4780 | 4828  | 4875         | 4923 | 4970 | 5018     | 5065 | 5113    |        |
| 52    | 5160         | 5208 | 5255 | 5302  | 5350         | 5397 | 5445 | 5492     | 5540 | 5587    |        |
| 53    | 5635         | 5682 | 5730 | 5777  | 5824         | 5872 | 5919 | 5967     | 6014 | 6062    |        |
| 54    | 6109         | 6157 | 6204 | 6251  | 6299         | 6346 | 6394 | 6441     | 6489 | 6536    |        |
| 55    | 6583         | 6631 | 6678 | 6726  | 6773         | 6821 | 6868 | 6916     | 6963 | 7010    |        |
| 56    | 7058         | 7105 | 7153 | 7200  | 7248         | 7295 | 7342 | 7390     | 7437 | 7485    |        |
| 57    | 7532         | 7580 | 7627 | 7674  | 7722         | 7769 | 7817 | 7864     | 7912 | 7959    |        |
| 58    | 8006         | 8054 | 8101 | 8149  | 8196         | 8243 | 8291 | 8338     | 8386 | 8433    |        |
| 59    | 8481         | 8528 | 8575 | 8623  | 8670         | 8718 | 8765 | 8812     | 8860 | 8907    |        |
| 9160  | 961 8955     | 9002 | 9050 | 9097  | 9144         | 9192 | 9239 | 9287     | 9334 | 9381    |        |
| 61    | 9429         | 9476 | 9524 | 9571  | 9618         | 9666 | 9713 | 9761     | 9808 | 9855    | 48     |
| 62    | 9903         | 9950 | 9998 | 0045  | 0092         | 0140 | 0187 | 0235     | 0282 | 0329    | 1 4.8  |
| 63    | 962 0377     | 0424 | 0472 | 0519  | 0566         | 0614 | 0661 | 0709     | 0756 | 0803    | 2 9.6  |
| 64    | 0851         | 0898 | 0946 | 0993  | 1040         | 1088 | 1135 | 1183     | 1230 | 1277    | 3 14.4 |
| 65    | 1325         | 1372 | 1419 | 1467  | 1514         | 1562 | 1609 | 1656     | 1704 | 1751    | 4 19.2 |
| 66    | 1799         | 1846 | 1893 | 1941  | 1988         | 2035 | 2083 | 2130     | 2178 | 2225    | 5 24.0 |
| 67    | 2272         | 2320 | 2367 | 2414  | 2462         | 2509 | 2557 | 2604     | 2651 | 2699    | 6 28.8 |
| 68    | 2746         | 2793 | 2841 | 2888  | 2936         | 2983 | 3030 | 3078     | 3125 | 3172    | 7 33.6 |
| 69    | 3220         | 3267 | 3314 | 3362  | 3409         | 3457 | 3504 | 3551     | 3599 | 3646    | 8 38.4 |
| 9170  | 962 3693     | 3741 | 3788 | 3835  | 3883         | 3930 | 3978 | 4025     | 4072 | 4120    | 9 43.2 |
| 71    | 4167         | 4214 | 4262 | 4309  | 4356         | 4404 | 4451 | 4498     | 4546 | 4593    |        |
| 72    | 4640         | 4688 | 4735 | 4783  | 4830         | 4877 | 4925 | 4972     | 5019 | 5067    |        |
| 73    | 5114         | 5161 | 5209 | 5256  | 5303         | 5351 | 5398 | 5445     | 5493 | 5540    |        |
| 74    | 5587         | 5635 | 5682 | 5729  | 5777         | 5824 | 5871 | 5919     | 5966 | 6013    |        |
| 75    | 6061         | 6108 | 6155 | 6203  | 6250         | 6297 | 6345 | 6392     | 6439 | 6487    |        |
| 76    | 6534         | 6581 | 6629 | 6676  | 6723         | 6771 | 6818 | 6865     | 6913 | 6960    |        |
| 77    | 7007         | 7055 | 7102 | 7149  | 7197         | 7244 | 7291 | 7339     | 7386 | 7433    |        |
| 78    | 7481         | 7528 | 7575 | 7622  | 7670         | 7717 | 7764 | 7812     | 7859 | 7906    |        |
| 79    | 7954         | 8001 | 8048 | 8096  | 8143         | 8190 | 8238 | 8285     | 8332 | 8380    |        |
| 9180  | 962 8427     | 8474 | 8521 | 8569  | 8616         | 8663 | 8711 | 8758     | 8805 | 8853    |        |
| 81    | 8900         | 8947 | 8994 | 9042  | 9089         | 9136 | 9184 | 9231     | 9278 | 9326    | 47     |
| 82    | 9373         | 9420 | 9467 | 9515  | 9562         | 9609 | 9657 | 9704     | 9751 | 9799    | 1 4.7  |
| 83    | 9846         | 9893 | 9940 | 9988  | 0035         | 0082 | 0130 | 0177     | 0224 | 0271    | 2 9.4  |
| 84    | 963 0319     | 0366 | 0413 | 0461  | 0508         | 0555 | 0602 | 0650     | 0697 | 0744    | 3 14.1 |
| 85    | 0792         | 0839 | 0886 | 0933  | 0981         | 1028 | 1075 | 1123     | 1170 | 1217    | 4 18.8 |
| 86    | 1264         | 1312 | 1359 | 1406  | 1454         | 1501 | 1548 | 1595     | 1643 | 1690    | 5 23.5 |
| 87    | 1737         | 1784 | 1832 | 1879  | 1926         | 1974 | 2021 | 2068     | 2115 | 2163    | 6 28.2 |
| 88    | 2210         | 2257 | 2304 | 2352  | 2399         | 2446 | 2493 | 2541     | 2588 | 2635    | 7 32.9 |
| 89    | 2683         | 2730 | 2777 | 2824  | 2872         | 2919 | 2966 | 3013     | 3061 | 3108    | 8 37.6 |
| 9190  | 963 3155     | 3202 | 3250 | 3297  | 3344         | 3391 | 3439 | 3486     | 3533 | 3580    | 9 42.3 |
| 91    | 3628         | 3675 | 3722 | 3769  | 3817         | 3864 | 3911 | 3958     | 4006 | 4053    |        |
| 92    | 4100         | 4147 | 4195 | 4242  | 4289         | 4336 | 4384 | 4431     | 4478 | 4525    |        |
| 93    | 4573         | 4620 | 4667 | 4714  | 4762         | 4809 | 4856 | 4903     | 4951 | 4998    |        |
| 94    | 5045         | 5092 | 5139 | 5187  | 5234         | 5281 | 5328 | 5376     | 5423 | 5470    |        |
| 95    | 5517         | 5565 | 5612 | 5659  | 5706         | 5753 | 5801 | 5848     | 5895 | 5942    |        |
| 96    | 5990         | 6037 | 6084 | 6131  | 6179         | 6226 | 6273 | 6320     | 6367 | 6415    |        |
| 97    | 6462         | 6509 | 6556 | 6604  | 6651         | 6698 | 6745 | 6792     | 6840 | 6887    |        |
| 98    | 6934         | 6981 | 7028 | 7076  | 7123         | 7170 | 7217 | 7265     | 7312 | 7359    |        |
| 99    | 7406         | 7453 | 7501 | 7548  | 7595         | 7642 | 7689 | 7737     | 7784 | 7831    |        |
| 9200  | 963 7878     | 7925 | 7973 | 8020  | 8067         | 8114 | 8161 | 8209     | 8256 | 8303    |        |
| N.    | 0            | 1    | 2    | 3     | 4            | 5    | 6    | 7        | 8    | 9       | P. P.  |
| 91500 | = 25° 25' 0" |      |      | 91500 | = 2° 32' 30" |      |      | S. 4.685 | 4324 | T. 8599 |        |
| 91600 | = 25 26 40   |      |      | 91600 | = 2 32 40    |      |      |          | 4321 | 8605    |        |
| 91700 | = 25 28 20   |      |      | 91700 | = 2 32 50    |      |      |          | 4318 | 8611    |        |
| 91800 | = 25 30 0    |      |      | 91800 | = 2 33 0     |      |      |          | 4315 | 8617    |        |
| 91900 | = 25 31 40   |      |      | 91900 | = 2 33 10    |      |      |          | 4312 | 8624    |        |



| N.    | 0        | 1    | 2    | 3    | 4    | 5     | 6     | 7     | 8     | 9     | P. P. |
|-------|----------|------|------|------|------|-------|-------|-------|-------|-------|-------|
| 0200  | 963 7878 | 7925 | 7973 | 8020 | 8067 | 8114  | 8161  | 8208  | 8255  | 8302  |       |
| 01    | 8150     | 8198 | 8245 | 8292 | 8339 | 8386  | 8433  | 8480  | 8527  | 8574  |       |
| 02    | 8822     | 8869 | 8917 | 8964 | 9011 | 9058  | 9105  | 9152  | 9199  | 9246  |       |
| 03    | 9294     | 9341 | 9389 | 9436 | 9483 | 9530  | 9577  | 9624  | 9671  | 9718  |       |
| 04    | 9766     | 9813 | 9860 | 9907 | 9954 | 10001 | 10048 | 10095 | 10142 | 10189 |       |
| 05    | 964 0238 | 0285 | 0332 | 0379 | 0426 | 0473  | 0520  | 0567  | 0614  | 0661  |       |
| 06    | 0710     | 0757 | 0804 | 0851 | 0898 | 0945  | 0992  | 1039  | 1086  | 1133  |       |
| 07    | 1181     | 1228 | 1275 | 1322 | 1369 | 1416  | 1463  | 1510  | 1557  | 1604  |       |
| 08    | 1653     | 1700 | 1747 | 1794 | 1841 | 1888  | 1935  | 1982  | 2029  | 2076  |       |
| 09    | 2125     | 2171 | 2218 | 2265 | 2312 | 2359  | 2406  | 2453  | 2500  | 2547  |       |
| 0210  | 964 2596 | 2643 | 2690 | 2737 | 2784 | 2831  | 2878  | 2925  | 2972  | 3019  |       |
| 11    | 3068     | 3115 | 3162 | 3209 | 3256 | 3303  | 3350  | 3397  | 3444  | 3491  | 48    |
| 12    | 3539     | 3586 | 3633 | 3680 | 3727 | 3774  | 3821  | 3868  | 3915  | 3962  | 49    |
| 13    | 4011     | 4058 | 4105 | 4152 | 4199 | 4246  | 4293  | 4340  | 4387  | 4434  | 50    |
| 14    | 4482     | 4529 | 4576 | 4623 | 4670 | 4717  | 4764  | 4811  | 4858  | 4905  | 51    |
| 15    | 4953     | 5000 | 5047 | 5094 | 5141 | 5188  | 5235  | 5282  | 5329  | 5376  | 52    |
| 16    | 5423     | 5470 | 5517 | 5564 | 5611 | 5658  | 5705  | 5752  | 5799  | 5846  | 53    |
| 17    | 5896     | 5943 | 5990 | 6037 | 6084 | 6131  | 6178  | 6225  | 6272  | 6319  | 54    |
| 18    | 6367     | 6414 | 6461 | 6508 | 6555 | 6602  | 6649  | 6696  | 6743  | 6790  | 55    |
| 19    | 6838     | 6885 | 6932 | 6979 | 7026 | 7073  | 7120  | 7167  | 7214  | 7261  | 56    |
| 0220  | 964 7389 | 7356 | 7403 | 7450 | 7497 | 7544  | 7591  | 7638  | 7685  | 7732  |       |
| 21    | 7780     | 7827 | 7874 | 7921 | 7968 | 8015  | 8062  | 8109  | 8156  | 8203  |       |
| 22    | 8251     | 8298 | 8345 | 8392 | 8439 | 8486  | 8533  | 8580  | 8627  | 8674  |       |
| 23    | 8722     | 8769 | 8816 | 8863 | 8910 | 8957  | 9004  | 9051  | 9098  | 9145  |       |
| 24    | 9193     | 9240 | 9287 | 9334 | 9381 | 9428  | 9475  | 9522  | 9569  | 9616  |       |
| 25    | 9664     | 9711 | 9758 | 9805 | 9852 | 9899  | 9946  | 9993  | 10040 | 10087 |       |
| 26    | 965 0135 | 0182 | 0229 | 0276 | 0323 | 0370  | 0417  | 0464  | 0511  | 0558  |       |
| 27    | 0605     | 0652 | 0699 | 0746 | 0793 | 0840  | 0887  | 0934  | 0981  | 1028  |       |
| 28    | 1076     | 1123 | 1170 | 1217 | 1264 | 1311  | 1358  | 1405  | 1452  | 1499  |       |
| 29    | 1546     | 1593 | 1640 | 1687 | 1734 | 1781  | 1828  | 1875  | 1922  | 1969  |       |
| 0230  | 965 2017 | 2064 | 2111 | 2158 | 2205 | 2252  | 2299  | 2346  | 2393  | 2440  |       |
| 31    | 2488     | 2535 | 2582 | 2629 | 2676 | 2723  | 2770  | 2817  | 2864  | 2911  | 47    |
| 32    | 2958     | 3005 | 3052 | 3099 | 3146 | 3193  | 3240  | 3287  | 3334  | 3381  | 48    |
| 33    | 3428     | 3475 | 3522 | 3569 | 3616 | 3663  | 3710  | 3757  | 3804  | 3851  | 49    |
| 34    | 3899     | 3946 | 3993 | 4040 | 4087 | 4134  | 4181  | 4228  | 4275  | 4322  | 50    |
| 35    | 4369     | 4416 | 4463 | 4510 | 4557 | 4604  | 4651  | 4698  | 4745  | 4792  | 51    |
| 36    | 4839     | 4886 | 4933 | 4980 | 5027 | 5074  | 5121  | 5168  | 5215  | 5262  | 52    |
| 37    | 5309     | 5356 | 5403 | 5450 | 5497 | 5544  | 5591  | 5638  | 5685  | 5732  | 53    |
| 38    | 5780     | 5827 | 5874 | 5921 | 5968 | 6015  | 6062  | 6109  | 6156  | 6203  | 54    |
| 39    | 6250     | 6297 | 6344 | 6391 | 6438 | 6485  | 6532  | 6579  | 6626  | 6673  | 55    |
| 0240  | 965 6720 | 6767 | 6814 | 6861 | 6908 | 6955  | 7002  | 7049  | 7096  | 7143  |       |
| 41    | 7190     | 7237 | 7284 | 7331 | 7378 | 7425  | 7472  | 7519  | 7566  | 7613  |       |
| 42    | 7660     | 7707 | 7754 | 7801 | 7848 | 7895  | 7942  | 7989  | 8036  | 8083  |       |
| 43    | 8130     | 8177 | 8224 | 8271 | 8318 | 8365  | 8412  | 8459  | 8506  | 8553  |       |
| 44    | 8599     | 8646 | 8693 | 8740 | 8787 | 8834  | 8881  | 8928  | 8975  | 9022  |       |
| 45    | 9069     | 9116 | 9163 | 9210 | 9257 | 9304  | 9351  | 9398  | 9445  | 9492  |       |
| 46    | 9539     | 9586 | 9633 | 9680 | 9727 | 9774  | 9821  | 9868  | 9915  | 9962  |       |
| 47    | 966 0009 | 0056 | 0103 | 0149 | 0196 | 0243  | 0290  | 0337  | 0384  | 0431  |       |
| 48    | 0478     | 0525 | 0572 | 0619 | 0666 | 0713  | 0760  | 0807  | 0854  | 0901  |       |
| 49    | 0948     | 0995 | 1042 | 1089 | 1136 | 1183  | 1230  | 1277  | 1324  | 1371  |       |
| 0250  | 966 1417 | 1464 | 1511 | 1558 | 1605 | 1652  | 1699  | 1746  | 1793  | 1840  |       |
| N.    | 0        | 1    | 2    | 3    | 4    | 5     | 6     | 7     | 8     | 9     | P. P. |
| 92000 | 25       | 33   | 30   |      |      |       |       |       |       |       |       |
| 92100 | 25       | 33   | 0    |      |      |       |       |       |       |       |       |
| 92200 | 25       | 36   | 40   |      |      |       |       |       |       |       |       |
| 92300 | 25       | 38   | 20   |      |      |       |       |       |       |       |       |
| 92400 | 25       | 40   | 0    |      |      |       |       |       |       |       |       |



| N.    | 0             | 1    | 2    | 3     | 4     | 5            | 6        | 7     | 8       | 9     | P. P.  |
|-------|---------------|------|------|-------|-------|--------------|----------|-------|---------|-------|--------|
| 9250  | 966 1417      | 1464 | 1511 | 1558  | 1605  | 1652         | 1699     | 1746  | 1793    | 1840  |        |
| 51    | 1887          | 1934 | 1981 | 2028  | 2075  | 2122         | 2168     | 2215  | 2262    | 2309  |        |
| 52    | 2356          | 2403 | 2450 | 2497  | 2544  | 2591         | 2638     | 2685  | 2732    | 2779  |        |
| 53    | 2826          | 2873 | 2919 | 2966  | 3013  | 3060         | 3107     | 3154  | 3201    | 3248  |        |
| 54    | 3295          | 3342 | 3389 | 3436  | 3483  | 3530         | 3577     | 3623  | 3670    | 3717  |        |
| 55    | 3764          | 3811 | 3858 | 3905  | 3952  | 3999         | 4046     | 4093  | 4140    | 4187  |        |
| 56    | 4233          | 4280 | 4327 | 4374  | 4421  | 4468         | 4515     | 4562  | 4609    | 4656  |        |
| 57    | 4703          | 4750 | 4796 | 4843  | 4890  | 4937         | 4984     | 5031  | 5078    | 5125  |        |
| 58    | 5172          | 5219 | 5266 | 5312  | 5359  | 5406         | 5453     | 5500  | 5547    | 5594  |        |
| 59    | 5641          | 5688 | 5735 | 5782  | 5828  | 5875         | 5922     | 5969  | 6016    | 6063  |        |
| 9260  | 966 6110      | 6157 | 6204 | 6251  | 6297  | 6344         | 6391     | 6438  | 6485    | 6532  |        |
| 61    | 6579          | 6626 | 6673 | 6720  | 6766  | 6813         | 6860     | 6907  | 6954    | 7001  | 47     |
| 62    | 7048          | 7095 | 7142 | 7188  | 7235  | 7282         | 7329     | 7376  | 7423    | 7470  | 1 4.7  |
| 63    | 7517          | 7564 | 7610 | 7657  | 7704  | 7751         | 7798     | 7845  | 7892    | 7939  | 2 9.4  |
| 64    | 7985          | 8032 | 8079 | 8126  | 8173  | 8220         | 8267     | 8314  | 8360    | 8407  | 3 14.1 |
| 65    | 8454          | 8501 | 8548 | 8595  | 8642  | 8689         | 8735     | 8782  | 8829    | 8876  | 4 18.8 |
| 66    | 8923          | 8970 | 9017 | 9064  | 9110  | 9157         | 9204     | 9251  | 9298    | 9345  | 5 23.5 |
| 67    | 9392          | 9438 | 9485 | 9532  | 9579  | 9626         | 9673     | 9720  | 9767    | 9813  | 6 28.2 |
| 68    | 9860          | 9907 | 9954 | 10001 | 10048 | 10095        | 10141    | 10188 | 10235   | 10282 | 7 32.9 |
| 69    | 967 0329      | 0376 | 0423 | 0469  | 0516  | 0563         | 0610     | 0657  | 0704    | 0750  | 8 37.6 |
| 9270  | 967 0797      | 0844 | 0891 | 0938  | 0985  | 1032         | 1078     | 1125  | 1172    | 1219  | 9 42.3 |
| 71    | 1266          | 1313 | 1359 | 1406  | 1453  | 1500         | 1547     | 1594  | 1641    | 1687  |        |
| 72    | 1734          | 1781 | 1828 | 1875  | 1922  | 1968         | 2015     | 2062  | 2109    | 2156  |        |
| 73    | 2203          | 2249 | 2296 | 2343  | 2390  | 2437         | 2484     | 2530  | 2577    | 2624  |        |
| 74    | 2671          | 2718 | 2765 | 2811  | 2858  | 2905         | 2952     | 2999  | 3046    | 3092  |        |
| 75    | 3139          | 3186 | 3233 | 3280  | 3326  | 3373         | 3420     | 3467  | 3514    | 3561  |        |
| 76    | 3607          | 3654 | 3701 | 3748  | 3795  | 3841         | 3888     | 3935  | 3982    | 4029  |        |
| 77    | 4076          | 4122 | 4169 | 4216  | 4263  | 4310         | 4356     | 4403  | 4450    | 4497  |        |
| 78    | 4544          | 4590 | 4637 | 4684  | 4731  | 4778         | 4825     | 4871  | 4918    | 4965  |        |
| 79    | 5022          | 5059 | 5105 | 5152  | 5199  | 5246         | 5293     | 5339  | 5386    | 5433  |        |
| 9280  | 967 5480      | 5527 | 5573 | 5620  | 5667  | 5714         | 5761     | 5807  | 5854    | 5901  |        |
| 81    | 5948          | 5995 | 6041 | 6088  | 6135  | 6182         | 6228     | 6275  | 6322    | 6369  | 46     |
| 82    | 6416          | 6462 | 6509 | 6556  | 6603  | 6650         | 6696     | 6743  | 6790    | 6837  | 1 4.6  |
| 83    | 6884          | 6930 | 6977 | 7024  | 7071  | 7117         | 7164     | 7211  | 7258    | 7305  | 2 9.2  |
| 84    | 7351          | 7398 | 7445 | 7492  | 7538  | 7585         | 7632     | 7679  | 7726    | 7772  | 3 13.8 |
| 85    | 7819          | 7866 | 7913 | 7959  | 8006  | 8053         | 8100     | 8146  | 8193    | 8240  | 4 18.4 |
| 86    | 8287          | 8334 | 8380 | 8427  | 8474  | 8521         | 8567     | 8614  | 8661    | 8708  | 5 23.0 |
| 87    | 8754          | 8801 | 8848 | 8895  | 8942  | 8988         | 9035     | 9082  | 9129    | 9175  | 6 27.6 |
| 88    | 9222          | 9269 | 9316 | 9362  | 9409  | 9456         | 9503     | 9549  | 9596    | 9643  | 7 32.2 |
| 89    | 9690          | 9736 | 9783 | 9830  | 9877  | 9923         | 9970     | 10017 | 10064   | 10110 | 8 36.8 |
| 9290  | 968 0157      | 0204 | 0251 | 0297  | 0344  | 0391         | 0438     | 0484  | 0531    | 0578  | 9 41.4 |
| 91    | 0625          | 0671 | 0718 | 0765  | 0812  | 0858         | 0905     | 0952  | 0999    | 1045  |        |
| 92    | 1092          | 1139 | 1185 | 1232  | 1279  | 1326         | 1372     | 1419  | 1466    | 1513  |        |
| 93    | 1559          | 1606 | 1653 | 1700  | 1746  | 1793         | 1840     | 1886  | 1933    | 1980  |        |
| 94    | 2027          | 2073 | 2120 | 2167  | 2214  | 2260         | 2307     | 2354  | 2400    | 2447  |        |
| 95    | 2494          | 2541 | 2587 | 2634  | 2681  | 2728         | 2774     | 2821  | 2868    | 2914  |        |
| 96    | 2961          | 3008 | 3055 | 3101  | 3148  | 3195         | 3241     | 3288  | 3335    | 3382  |        |
| 97    | 3428          | 3475 | 3522 | 3568  | 3615  | 3662         | 3709     | 3755  | 3802    | 3849  |        |
| 98    | 3895          | 3942 | 3989 | 4036  | 4082  | 4129         | 4176     | 4222  | 4269    | 4316  |        |
| 99    | 4362          | 4409 | 4456 | 4503  | 4549  | 4596         | 4643     | 4689  | 4736    | 4783  |        |
| 9300  | 968 4829      | 4876 | 4923 | 4970  | 5016  | 5063         | 5110     | 5156  | 5203    | 5250  |        |
| N.    | 0             | 1    | 2    | 3     | 4     | 5            | 6        | 7     | 8       | 9     | P. P.  |
| 9250" | = 25° 41' 40" |      |      |       | 9250" | = 2° 34' 10" | S. 4.685 | 4293  | T. 8661 |       |        |
| 92600 | = 25 43 20    |      |      |       | 92600 | = 2 34 20    |          | 4290  | 8668    |       |        |
| 92700 | = 25 45 0     |      |      |       | 92700 | = 2 34 30    |          | 4287  | 8674    |       |        |
| 92800 | = 25 46 40    |      |      |       | 92800 | = 2 34 40    |          | 4283  | 8680    |       |        |
| 92900 | = 25 48 20    |      |      |       | 92900 | = 2 34 50    |          | 4280  | 8687    |       |        |







| N.    | 0             | 1    | 2    | 3    | 4     | 5            | 6        | 7    | 8       | 9    | P. P.  |
|-------|---------------|------|------|------|-------|--------------|----------|------|---------|------|--------|
| 9350  | 970 8116      | 8163 | 8209 | 8255 | 8302  | 8348         | 8395     | 8441 | 8488    | 8534 |        |
| 51    | 8581          | 8627 | 8673 | 8720 | 8766  | 8813         | 8859     | 8906 | 8952    | 8999 |        |
| 52    | 9045          | 9091 | 9138 | 9184 | 9231  | 9277         | 9324     | 9370 | 9416    | 9463 |        |
| 53    | 9509          | 9556 | 9602 | 9649 | 9695  | 9742         | 9788     | 9834 | 9881    | 9927 |        |
| 54    | 9974          | 8020 | 8067 | 8113 | 8159  | 8206         | 8252     | 8299 | 8345    | 8391 |        |
| 55    | 971 0438      | 0484 | 0531 | 0577 | 0624  | 0670         | 0716     | 0763 | 0809    | 0856 |        |
| 56    | 0902          | 0949 | 0995 | 1041 | 1088  | 1134         | 1181     | 1227 | 1273    | 1320 |        |
| 57    | 1366          | 1413 | 1459 | 1506 | 1552  | 1598         | 1645     | 1691 | 1738    | 1784 |        |
| 58    | 1830          | 1877 | 1923 | 1970 | 2016  | 2062         | 2109     | 2155 | 2202    | 2248 |        |
| 59    | 2294          | 2341 | 2387 | 2434 | 2480  | 2526         | 2573     | 2619 | 2666    | 2712 |        |
| 9360  | 971 2758      | 2805 | 2851 | 2898 | 2944  | 2990         | 3037     | 3083 | 3130    | 3176 |        |
| 61    | 3222          | 3269 | 3315 | 3362 | 3408  | 3454         | 3501     | 3547 | 3594    | 3640 | 47     |
| 62    | 3686          | 3733 | 3779 | 3826 | 3872  | 3918         | 3965     | 4011 | 4057    | 4104 | 1 4.7  |
| 63    | 4150          | 4197 | 4243 | 4289 | 4336  | 4382         | 4429     | 4475 | 4521    | 4568 | 2 9.4  |
| 64    | 4614          | 4660 | 4707 | 4753 | 4800  | 4846         | 4892     | 4939 | 4985    | 5031 | 3 14.1 |
| 65    | 5078          | 5124 | 5171 | 5217 | 5263  | 5310         | 5356     | 5402 | 5449    | 5495 | 4 18.8 |
| 66    | 5542          | 5588 | 5634 | 5681 | 5727  | 5773         | 5820     | 5866 | 5912    | 5959 | 5 23.5 |
| 67    | 6005          | 6052 | 6098 | 6144 | 6191  | 6237         | 6283     | 6330 | 6376    | 6422 | 6 28.2 |
| 68    | 6469          | 6515 | 6562 | 6608 | 6654  | 6701         | 6747     | 6793 | 6840    | 6886 | 7 32.9 |
| 69    | 6932          | 6979 | 7025 | 7071 | 7118  | 7164         | 7211     | 7257 | 7303    | 7350 | 8 37.6 |
| 9370  | 971 7396      | 7442 | 7489 | 7535 | 7581  | 7628         | 7674     | 7720 | 7767    | 7813 | 9 42.3 |
| 71    | 7859          | 7906 | 7952 | 7998 | 8045  | 8091         | 8137     | 8184 | 8230    | 8276 |        |
| 72    | 8323          | 8369 | 8415 | 8462 | 8508  | 8554         | 8601     | 8647 | 8694    | 8740 |        |
| 73    | 8786          | 8833 | 8879 | 8925 | 8972  | 9018         | 9064     | 9111 | 9157    | 9203 |        |
| 74    | 9249          | 9296 | 9342 | 9388 | 9435  | 9481         | 9527     | 9574 | 9620    | 9666 |        |
| 75    | 9713          | 9759 | 9805 | 9852 | 9898  | 9944         | 9991     | 8037 | 8083    | 8130 |        |
| 76    | 972 0176      | 0222 | 0269 | 0315 | 0361  | 0408         | 0454     | 0500 | 0547    | 0593 |        |
| 77    | 0639          | 0685 | 0732 | 0778 | 0824  | 0871         | 0917     | 0963 | 1010    | 1056 |        |
| 78    | 1102          | 1149 | 1195 | 1241 | 1288  | 1334         | 1380     | 1426 | 1473    | 1519 |        |
| 79    | 1565          | 1612 | 1658 | 1704 | 1751  | 1797         | 1843     | 1889 | 1936    | 1982 |        |
| 9380  | 972 2028      | 2075 | 2121 | 2167 | 2214  | 2260         | 2306     | 2352 | 2399    | 2445 |        |
| 81    | 2491          | 2538 | 2584 | 2630 | 2677  | 2723         | 2769     | 2815 | 2862    | 2908 | 46     |
| 82    | 2954          | 3001 | 3047 | 3093 | 3139  | 3186         | 3232     | 3278 | 3325    | 3371 | 1 4.6  |
| 83    | 3417          | 3463 | 3510 | 3556 | 3602  | 3649         | 3695     | 3741 | 3787    | 3834 | 2 9.2  |
| 84    | 3880          | 3926 | 3973 | 4019 | 4065  | 4111         | 4158     | 4204 | 4250    | 4296 | 3 13.8 |
| 85    | 4343          | 4389 | 4435 | 4482 | 4528  | 4574         | 4620     | 4667 | 4713    | 4759 | 4 18.4 |
| 86    | 4805          | 4852 | 4898 | 4944 | 4991  | 5037         | 5083     | 5129 | 5176    | 5222 | 5 23.0 |
| 87    | 5268          | 5314 | 5361 | 5407 | 5453  | 5500         | 5546     | 5592 | 5638    | 5685 | 6 27.6 |
| 88    | 5731          | 5777 | 5823 | 5870 | 5916  | 5962         | 6008     | 6055 | 6101    | 6147 | 7 32.2 |
| 89    | 6193          | 6240 | 6286 | 6332 | 6378  | 6425         | 6471     | 6517 | 6563    | 6610 | 8 36.8 |
| 9390  | 972 6656      | 6702 | 6748 | 6795 | 6841  | 6887         | 6933     | 6980 | 7026    | 7072 | 9 41.4 |
| 91    | 7118          | 7165 | 7211 | 7257 | 7303  | 7350         | 7396     | 7442 | 7488    | 7535 |        |
| 92    | 7581          | 7627 | 7673 | 7720 | 7766  | 7812         | 7858     | 7905 | 7951    | 7997 |        |
| 93    | 8043          | 8089 | 8136 | 8182 | 8228  | 8274         | 8321     | 8367 | 8413    | 8459 |        |
| 94    | 8506          | 8552 | 8598 | 8644 | 8690  | 8737         | 8783     | 8829 | 8875    | 8922 |        |
| 95    | 8968          | 9014 | 9060 | 9107 | 9153  | 9199         | 9245     | 9291 | 9338    | 9384 |        |
| 96    | 9430          | 9476 | 9523 | 9569 | 9615  | 9661         | 9707     | 9754 | 9800    | 9846 |        |
| 97    | 9892          | 9938 | 9985 | 8031 | 8077  | 8123         | 8170     | 8216 | 8262    | 8308 |        |
| 98    | 973 0354      | 0401 | 0447 | 0493 | 0539  | 0585         | 0632     | 0678 | 0724    | 0770 |        |
| 99    | 0816          | 0863 | 0909 | 0955 | 1001  | 1048         | 1094     | 1140 | 1186    | 1232 |        |
| 9400  | 973 1279      | 1325 | 1371 | 1417 | 1463  | 1510         | 1556     | 1602 | 1648    | 1694 |        |
| N.    | 0             | 1    | 2    | 3    | 4     | 5            | 6        | 7    | 8       | 9    | P. P.  |
| 93500 | = 25° 58' 20" |      |      |      | 93500 | = 2° 35' 50" | S. 4.685 | 4261 | T. 8725 |      |        |
| 93600 | = 26° 0' 0"   |      |      |      | 93600 | = 2° 36' 0"  |          | 4258 | 8731    |      |        |
| 93700 | = 26° 1' 40"  |      |      |      | 93700 | = 2° 36' 10" |          | 4255 | 8737    |      |        |
| 93800 | = 26° 3' 20"  |      |      |      | 93800 | = 2° 36' 20" |          | 4252 | 8744    |      |        |
| 93900 | = 26° 5' 0"   |      |      |      | 93900 | = 2° 36' 30" |          | 4248 | 8750    |      |        |



| N.    | 0            | 1    | 2    | 3    | 4     | 5            | 6             | 7    | 8       | 9    | P. P.  |
|-------|--------------|------|------|------|-------|--------------|---------------|------|---------|------|--------|
| 9400  | 973 1279     | 1325 | 1371 | 1417 | 1463  | 1510         | 1556          | 1602 | 1648    | 1694 |        |
| 01    | 1741         | 1787 | 1833 | 1879 | 1925  | 1972         | 2018          | 2064 | 2110    | 2156 |        |
| 02    | 2202         | 2249 | 2295 | 2341 | 2387  | 2433         | 2480          | 2526 | 2572    | 2618 |        |
| 03    | 2664         | 2711 | 2757 | 2803 | 2849  | 2895         | 2941          | 2988 | 3034    | 3080 |        |
| 04    | 3126         | 3172 | 3219 | 3265 | 3311  | 3357         | 3403          | 3449 | 3496    | 3542 |        |
| 05    | 3588         | 3634 | 3680 | 3727 | 3773  | 3819         | 3865          | 3911 | 3957    | 4004 |        |
| 06    | 4050         | 4096 | 4142 | 4188 | 4234  | 4281         | 4327          | 4373 | 4419    | 4465 |        |
| 07    | 4511         | 4558 | 4604 | 4650 | 4696  | 4742         | 4788          | 4835 | 4881    | 4927 |        |
| 08    | 4973         | 5019 | 5065 | 5112 | 5158  | 5204         | 5250          | 5296 | 5342    | 5389 |        |
| 09    | 5435         | 5481 | 5527 | 5573 | 5619  | 5665         | 5712          | 5758 | 5804    | 5850 |        |
| 9410  | 973 5896     | 5942 | 5989 | 6035 | 6081  | 6127         | 6173          | 6219 | 6265    | 6312 |        |
| 11    | 6358         | 6404 | 6450 | 6496 | 6542  | 6588         | 6635          | 6681 | 6727    | 6773 | 47     |
| 12    | 6819         | 6865 | 6911 | 6958 | 7004  | 7050         | 7096          | 7142 | 7188    | 7234 | 1 4.7  |
| 13    | 7281         | 7327 | 7373 | 7419 | 7465  | 7511         | 7557          | 7604 | 7650    | 7696 | 2 9.4  |
| 14    | 7742         | 7788 | 7834 | 7880 | 7926  | 7973         | 8019          | 8065 | 8111    | 8157 | 3 14.1 |
| 15    | 8203         | 8249 | 8295 | 8342 | 8388  | 8434         | 8480          | 8526 | 8572    | 8618 | 4 18.8 |
| 16    | 8664         | 8711 | 8757 | 8803 | 8849  | 8895         | 8941          | 8987 | 9033    | 9080 | 5 23.5 |
| 17    | 9126         | 9172 | 9218 | 9264 | 9310  | 9356         | 9402          | 9449 | 9495    | 9541 | 6 28.2 |
| 18    | 9587         | 9633 | 9679 | 9725 | 9771  | 9817         | 9864          | 9910 | 9956    | 0002 | 7 32.9 |
| 19    | 974 0048     | 0094 | 0140 | 0186 | 0232  | 0279         | 0325          | 0371 | 0417    | 0463 | 8 37.6 |
| 9420  | 974 0509     | 0555 | 0601 | 0647 | 0693  | 0740         | 0786          | 0832 | 0878    | 0924 | 9 42.3 |
| 21    | 0970         | 1016 | 1062 | 1108 | 1154  | 1201         | 1247          | 1293 | 1339    | 1385 |        |
| 22    | 1431         | 1477 | 1523 | 1569 | 1615  | 1661         | 1708          | 1754 | 1800    | 1846 |        |
| 23    | 1892         | 1938 | 1984 | 2030 | 2076  | 2122         | 2168          | 2215 | 2261    | 2307 |        |
| 24    | 2353         | 2399 | 2445 | 2491 | 2537  | 2583         | 2629          | 2675 | 2721    | 2768 |        |
| 25    | 2814         | 2860 | 2906 | 2952 | 2998  | 3044         | 3090          | 3136 | 3182    | 3228 |        |
| 26    | 3274         | 3320 | 3367 | 3413 | 3459  | 3505         | 3551          | 3597 | 3643    | 3689 |        |
| 27    | 3735         | 3781 | 3827 | 3873 | 3919  | 3965         | 4011          | 4058 | 4104    | 4150 |        |
| 28    | 4196         | 4242 | 4288 | 4334 | 4380  | 4426         | 4472          | 4518 | 4564    | 4610 |        |
| 29    | 4656         | 4702 | 4748 | 4795 | 4841  | 4887         | 4933          | 4979 | 5025    | 5071 |        |
| 9480  | 974 5117     | 5163 | 5209 | 5255 | 5301  | 5347         | 5393          | 5439 | 5485    | 5531 |        |
| 31    | 5577         | 5623 | 5670 | 5716 | 5762  | 5808         | 5854          | 5900 | 5946    | 5992 | 46     |
| 32    | 6038         | 6084 | 6130 | 6176 | 6222  | 6268         | 6314          | 6360 | 6406    | 6452 | 1 4.6  |
| 33    | 6498         | 6544 | 6590 | 6636 | 6683  | 6729         | 6775          | 6821 | 6867    | 6913 | 2 9.2  |
| 34    | 6959         | 7005 | 7051 | 7097 | 7143  | 7189         | 7235          | 7281 | 7327    | 7373 | 3 13.8 |
| 35    | 7419         | 7465 | 7511 | 7557 | 7603  | 7649         | 7695          | 7741 | 7787    | 7833 | 4 18.4 |
| 36    | 7879         | 7925 | 7971 | 8017 | 8063  | 8109         | 8155          | 8201 | 8248    | 8294 | 5 23.0 |
| 37    | 8340         | 8386 | 8432 | 8478 | 8524  | 8570         | 8616          | 8662 | 8708    | 8754 | 6 27.6 |
| 38    | 8800         | 8846 | 8892 | 8938 | 8984  | 9030         | 9076          | 9122 | 9168    | 9214 | 7 32.2 |
| 39    | 9260         | 9306 | 9352 | 9398 | 9444  | 9490         | 9536          | 9582 | 9628    | 9674 | 8 36.8 |
| 9440  | 974 9720     | 9766 | 9812 | 9858 | 9904  | 9950         | 9996          | 0042 | 0088    | 0134 | 9 41.4 |
| 41    | 975 0180     | 0226 | 0272 | 0318 | 0364  | 0410         | 0456          | 0502 | 0548    | 0594 |        |
| 42    | 0640         | 0686 | 0732 | 0778 | 0824  | 0870         | 0916          | 0962 | 1008    | 1054 |        |
| 43    | 1100         | 1146 | 1192 | 1238 | 1284  | 1330         | 1376          | 1422 | 1468    | 1514 |        |
| 44    | 1560         | 1606 | 1652 | 1698 | 1744  | 1790         | 1836          | 1882 | 1928    | 1974 |        |
| 45    | 2020         | 2066 | 2112 | 2158 | 2204  | 2250         | 2296          | 2341 | 2387    | 2433 |        |
| 46    | 2479         | 2525 | 2571 | 2617 | 2663  | 2709         | 2755          | 2801 | 2847    | 2893 |        |
| 47    | 2939         | 2985 | 3031 | 3077 | 3123  | 3169         | 3215          | 3261 | 3307    | 3353 |        |
| 48    | 3399         | 3445 | 3491 | 3537 | 3583  | 3629         | 3675          | 3721 | 3767    | 3813 |        |
| 49    | 3858         | 3904 | 3950 | 3996 | 4042  | 4088         | 4134          | 4180 | 4226    | 4272 |        |
| 9450  | 975 4318     | 4364 | 4410 | 4456 | 4502  | 4548         | 4594          | 4640 | 4686    | 4732 |        |
| N.    | 0            | 1    | 2    | 3    | 4     | 5            | 6             | 7    | 8       | 9    | P. P.  |
| 94000 | = 26° 6' 40" |      |      |      | 94000 | = 2° 36' 40" | S. 4.685 4245 |      | T. 8757 |      |        |
| 94100 | = 26 8 20    |      |      |      | 94100 | = 2 36 50    |               | 4242 | 8763    |      |        |
| 94200 | = 26 10 0    |      |      |      | 94200 | = 2 37 0     |               | 4239 | 8769    |      |        |
| 94300 | = 26 11 40   |      |      |      | 94300 | = 2 37 10    |               | 4236 | 8776    |      |        |
| 94400 | = 26 13 20   |      |      |      | 94400 | = 2 37 20    |               | 4232 | 8782    |      |        |



| N.    | 0          | 1    | 2     | 3     | 4     | 5          | 6      | 7     | 8       | 9     | P. P. |
|-------|------------|------|-------|-------|-------|------------|--------|-------|---------|-------|-------|
| 9450  | 975 4318   | 4364 | 4410  | 4456  | 4502  | 4548       | 4594   | 4640  | 4686    | 4732  |       |
| 51    | 4778       | 4824 | 4870  | 4915  | 4961  | 5007       | 5053   | 5099  | 5145    | 5191  |       |
| 52    | 5237       | 5283 | 5329  | 5375  | 5421  | 5467       | 5513   | 5559  | 5605    | 5651  |       |
| 53    | 5697       | 5743 | 5788  | 5834  | 5880  | 5926       | 5972   | 6018  | 6064    | 6110  |       |
| 54    | 6156       | 6202 | 6248  | 6294  | 6340  | 6386       | 6432   | 6478  | 6523    | 6569  |       |
| 55    | 6615       | 6661 | 6707  | 6753  | 6799  | 6845       | 6891   | 6937  | 6983    | 7029  |       |
| 56    | 7075       | 7121 | 7166  | 7212  | 7258  | 7304       | 7350   | 7396  | 7442    | 7488  |       |
| 57    | 7534       | 7580 | 7626  | 7672  | 7718  | 7764       | 7809   | 7855  | 7901    | 7947  |       |
| 58    | 7994       | 8039 | 8085  | 8131  | 8177  | 8223       | 8269   | 8315  | 8360    | 8406  |       |
| 59    | 8452       | 8498 | 8544  | 8590  | 8636  | 8682       | 8728   | 8774  | 8820    | 8865  |       |
| 9460  | 975 8911   | 8957 | 9003  | 9049  | 9095  | 9141       | 9187   | 9233  | 9279    | 9325  |       |
| 61    | 9370       | 9416 | 9462  | 9508  | 9554  | 9600       | 9646   | 9692  | 9738    | 9784  |       |
| 62    | 9829       | 9875 | 9921  | 9967  | 10013 | 10059      | 10105  | 10151 | 10197   | 10243 |       |
| 63    | 976 0288   | 0334 | 0380  | 0426  | 0472  | 0518       | 0564   | 0610  | 0656    | 0701  |       |
| 64    | 0747       | 0793 | 0839  | 0885  | 0931  | 0977       | 1023   | 1069  | 1114    | 1160  |       |
| 65    | 1206       | 1252 | 1298  | 1344  | 1390  | 1436       | 1481   | 1527  | 1573    | 1619  |       |
| 66    | 1665       | 1711 | 1757  | 1803  | 1849  | 1894       | 1940   | 1986  | 2032    | 2078  |       |
| 67    | 2124       | 2170 | 2216  | 2261  | 2307  | 2353       | 2399   | 2445  | 2491    | 2537  |       |
| 68    | 2582       | 2628 | 2674  | 2720  | 2766  | 2812       | 2858   | 2904  | 2950    | 2995  |       |
| 69    | 3041       | 3087 | 3133  | 3179  | 3225  | 3270       | 3316   | 3362  | 3408    | 3454  |       |
| 9470  | 976 3500   | 3546 | 3592  | 3637  | 3683  | 3729       | 3775   | 3821  | 3867    | 3913  |       |
| 71    | 3958       | 4004 | 4050  | 4096  | 4142  | 4188       | 4234   | 4279  | 4325    | 4371  |       |
| 72    | 4417       | 4463 | 4509  | 4554  | 4600  | 4646       | 4692   | 4738  | 4784    | 4830  |       |
| 73    | 4875       | 4921 | 4967  | 5013  | 5059  | 5105       | 5150   | 5196  | 5242    | 5288  |       |
| 74    | 5334       | 5380 | 5425  | 5471  | 5517  | 5563       | 5609   | 5655  | 5701    | 5746  |       |
| 75    | 5792       | 5838 | 5884  | 5930  | 5976  | 6021       | 6067   | 6113  | 6159    | 6205  |       |
| 76    | 6251       | 6296 | 6342  | 6388  | 6434  | 6480       | 6525   | 6571  | 6617    | 6663  |       |
| 77    | 6709       | 6755 | 6800  | 6846  | 6892  | 6938       | 6984   | 7030  | 7075    | 7121  |       |
| 78    | 7167       | 7213 | 7259  | 7305  | 7350  | 7396       | 7442   | 7488  | 7534    | 7579  |       |
| 79    | 7625       | 7671 | 7717  | 7763  | 7808  | 7854       | 7900   | 7946  | 7992    | 8038  |       |
| 9480  | 976 8083   | 8129 | 8175  | 8221  | 8267  | 8312       | 8358   | 8404  | 8450    | 8496  |       |
| 81    | 8541       | 8587 | 8633  | 8679  | 8725  | 8770       | 8816   | 8862  | 8908    | 8954  |       |
| 82    | 9000       | 9045 | 9091  | 9137  | 9183  | 9229       | 9274   | 9320  | 9366    | 9412  |       |
| 83    | 9458       | 9503 | 9549  | 9595  | 9641  | 9686       | 9732   | 9778  | 9824    | 9870  |       |
| 84    | 9915       | 9961 | 10007 | 10053 | 10099 | 10144      | 10190  | 10236 | 10282   | 10328 |       |
| 85    | 977 0373   | 0419 | 0465  | 0511  | 0556  | 0602       | 0648   | 0694  | 0740    | 0785  |       |
| 86    | 0831       | 0877 | 0923  | 0969  | 1014  | 1060       | 1106   | 1152  | 1197    | 1243  |       |
| 87    | 1289       | 1335 | 1381  | 1426  | 1472  | 1518       | 1564   | 1609  | 1655    | 1701  |       |
| 88    | 1747       | 1793 | 1838  | 1884  | 1930  | 1976       | 2021   | 2067  | 2113    | 2159  |       |
| 89    | 2204       | 2250 | 2296  | 2342  | 2388  | 2433       | 2479   | 2525  | 2571    | 2616  |       |
| 9490  | 977 2604   | 2650 | 2696  | 2742  | 2788  | 2834       | 2879   | 2925  | 2971    | 3017  |       |
| 91    | 3130       | 3176 | 3222  | 3267  | 3313  | 3359       | 3404   | 3450  | 3496    | 3542  |       |
| 92    | 3577       | 3623 | 3669  | 3715  | 3760  | 3806       | 3852   | 3898  | 3943    | 3989  |       |
| 93    | 4035       | 4081 | 4126  | 4172  | 4218  | 4264       | 4309   | 4355  | 4401    | 4447  |       |
| 94    | 4492       | 4538 | 4584  | 4630  | 4675  | 4721       | 4767   | 4812  | 4858    | 4904  |       |
| 95    | 4950       | 4995 | 5041  | 5087  | 5133  | 5178       | 5224   | 5270  | 5316    | 5361  |       |
| 96    | 5407       | 5453 | 5499  | 5544  | 5590  | 5636       | 5681   | 5727  | 5773    | 5819  |       |
| 97    | 5864       | 5910 | 5956  | 6002  | 6047  | 6093       | 6139   | 6184  | 6230    | 6276  |       |
| 98    | 6322       | 6367 | 6413  | 6459  | 6505  | 6550       | 6596   | 6642  | 6687    | 6733  |       |
| 99    | 6779       | 6825 | 6870  | 6916  | 6962  | 7007       | 7053   | 7099  | 7145    | 7191  |       |
| 9500  | 977 7236   | 7282 | 7327  | 7373  | 7419  | 7465       | 7510   | 7556  | 7602    | 7647  |       |
| N.    | 0          | 1    | 2     | 3     | 4     | 5          | 6      | 7     | 8       | 9     | P. P. |
| 94500 | 16° 15' 0" |      |       |       | 94500 | 2° 37' 30" | 8.4685 | 4120  | T. 8789 |       |       |
| 94600 | 16 16 40   |      |       |       | 94600 | 2 37 40    |        | 4116  | 8795    |       |       |
| 94700 | 16 18 20   |      |       |       | 94700 | 2 37 50    |        | 4113  | 8801    |       |       |
| 94800 | 16 20 0    |      |       |       | 94800 | 2 38 0     |        | 4110  | 8808    |       |       |
| 94900 | 16 21 40   |      |       |       | 94900 | 2 38 10    |        | 4106  | 8815    |       |       |



| N.   | 0             | 1    | 2    | 3    | 4    | 5            | 6        | 7    | 8       | 9    | P. P.  |
|------|---------------|------|------|------|------|--------------|----------|------|---------|------|--------|
| 9500 | 977 7236      | 7282 | 7327 | 7373 | 7419 | 7465         | 7510     | 7556 | 7602    | 7647 |        |
| 01   | 7693          | 7739 | 7785 | 7830 | 7876 | 7922         | 7967     | 8013 | 8059    | 8105 |        |
| 02   | 8150          | 8196 | 8242 | 8287 | 8333 | 8379         | 8424     | 8470 | 8516    | 8562 |        |
| 03   | 8607          | 8653 | 8699 | 8744 | 8790 | 8836         | 8881     | 8927 | 8973    | 9019 |        |
| 04   | 9064          | 9110 | 9156 | 9201 | 9247 | 9293         | 9338     | 9384 | 9430    | 9476 |        |
| 05   | 9521          | 9567 | 9613 | 9658 | 9704 | 9750         | 9795     | 9841 | 9887    | 9932 |        |
| 06   | 9978          | 0024 | 0069 | 0115 | 0161 | 0207         | 0252     | 0298 | 0344    | 0389 |        |
| 07   | 978 0435      | 0481 | 0526 | 0572 | 0618 | 0663         | 0709     | 0755 | 0800    | 0846 |        |
| 08   | 0892          | 0937 | 0983 | 1029 | 1074 | 1120         | 1166     | 1211 | 1257    | 1303 |        |
| 09   | 1348          | 1394 | 1440 | 1485 | 1531 | 1577         | 1622     | 1668 | 1714    | 1760 |        |
| 9510 | 978 1805      | 1851 | 1897 | 1942 | 1988 | 2033         | 2079     | 2125 | 2170    | 2216 |        |
| 11   | 2262          | 2307 | 2353 | 2399 | 2444 | 2490         | 2536     | 2581 | 2627    | 2673 | 40     |
| 12   | 2718          | 2764 | 2810 | 2855 | 2901 | 2947         | 2992     | 3038 | 3084    | 3129 | 1 4.6  |
| 13   | 3175          | 3221 | 3266 | 3312 | 3358 | 3403         | 3449     | 3495 | 3540    | 3586 | 2 9.2  |
| 14   | 3631          | 3677 | 3723 | 3768 | 3814 | 3860         | 3905     | 3951 | 3997    | 4042 | 3 13.8 |
| 15   | 4088          | 4134 | 4179 | 4225 | 4270 | 4316         | 4362     | 4407 | 4453    | 4499 | 4 18.4 |
| 16   | 4544          | 4590 | 4636 | 4681 | 4727 | 4773         | 4818     | 4864 | 4909    | 4955 | 5 23.0 |
| 17   | 5001          | 5046 | 5092 | 5138 | 5183 | 5229         | 5274     | 5320 | 5366    | 5411 | 6 27.6 |
| 18   | 5457          | 5503 | 5548 | 5594 | 5640 | 5685         | 5731     | 5776 | 5822    | 5868 | 7 32.2 |
| 19   | 5913          | 5959 | 6005 | 6050 | 6096 | 6141         | 6187     | 6233 | 6278    | 6324 | 8 36.8 |
| 9520 | 978 6369      | 6415 | 6461 | 6506 | 6552 | 6598         | 6643     | 6689 | 6734    | 6780 | 9 41.4 |
| 21   | 6826          | 6871 | 6917 | 6962 | 7008 | 7054         | 7099     | 7145 | 7191    | 7236 |        |
| 22   | 7282          | 7327 | 7373 | 7419 | 7464 | 7510         | 7555     | 7601 | 7647    | 7692 |        |
| 23   | 7738          | 7783 | 7829 | 7875 | 7920 | 7966         | 8011     | 8057 | 8103    | 8148 |        |
| 24   | 8194          | 8239 | 8285 | 8331 | 8376 | 8422         | 8467     | 8513 | 8559    | 8604 |        |
| 25   | 8650          | 8695 | 8741 | 8787 | 8832 | 8878         | 8923     | 8969 | 9015    | 9060 |        |
| 26   | 9106          | 9151 | 9197 | 9243 | 9288 | 9334         | 9379     | 9425 | 9470    | 9516 |        |
| 27   | 9562          | 9607 | 9653 | 9698 | 9744 | 9790         | 9835     | 9881 | 9926    | 9972 |        |
| 28   | 979 0017      | 0063 | 0109 | 0154 | 0200 | 0245         | 0291     | 0337 | 0382    | 0428 |        |
| 29   | 0473          | 0519 | 0564 | 0610 | 0656 | 0701         | 0747     | 0792 | 0838    | 0883 |        |
| 9530 | 979 0929      | 0975 | 1020 | 1066 | 1111 | 1157         | 1202     | 1248 | 1294    | 1339 |        |
| 31   | 1385          | 1430 | 1476 | 1521 | 1567 | 1613         | 1658     | 1704 | 1749    | 1795 | 45     |
| 32   | 1840          | 1886 | 1931 | 1977 | 2023 | 2068         | 2114     | 2159 | 2205    | 2250 | 1 4.5  |
| 33   | 2296          | 2341 | 2387 | 2433 | 2478 | 2524         | 2569     | 2615 | 2660    | 2706 | 2 9.0  |
| 34   | 2751          | 2797 | 2843 | 2888 | 2934 | 2979         | 3025     | 3070 | 3116    | 3161 | 3 13.5 |
| 35   | 3207          | 3253 | 3298 | 3344 | 3389 | 3435         | 3480     | 3526 | 3571    | 3617 | 4 18.0 |
| 36   | 3662          | 3708 | 3754 | 3799 | 3845 | 3890         | 3936     | 3981 | 4027    | 4072 | 5 22.5 |
| 37   | 4118          | 4163 | 4209 | 4254 | 4300 | 4346         | 4391     | 4437 | 4482    | 4528 | 6 27.0 |
| 38   | 4573          | 4619 | 4664 | 4710 | 4755 | 4801         | 4846     | 4892 | 4937    | 4983 | 7 31.5 |
| 39   | 5028          | 5074 | 5120 | 5165 | 5211 | 5256         | 5302     | 5347 | 5393    | 5438 | 8 36.0 |
| 9540 | 979 5484      | 5529 | 5575 | 5620 | 5666 | 5711         | 5757     | 5802 | 5848    | 5893 | 9 40.5 |
| 41   | 5939          | 5984 | 6030 | 6076 | 6121 | 6167         | 6212     | 6258 | 6303    | 6349 |        |
| 42   | 6394          | 6440 | 6485 | 6531 | 6576 | 6622         | 6667     | 6713 | 6758    | 6804 |        |
| 43   | 6849          | 6895 | 6940 | 6986 | 7031 | 7077         | 7122     | 7168 | 7213    | 7259 |        |
| 44   | 7304          | 7350 | 7395 | 7441 | 7486 | 7532         | 7577     | 7623 | 7668    | 7714 |        |
| 45   | 7759          | 7805 | 7850 | 7896 | 7941 | 7987         | 8032     | 8078 | 8123    | 8169 |        |
| 46   | 8214          | 8260 | 8305 | 8351 | 8396 | 8442         | 8487     | 8533 | 8578    | 8624 |        |
| 47   | 8669          | 8715 | 8760 | 8806 | 8851 | 8897         | 8942     | 8988 | 9033    | 9079 |        |
| 48   | 9124          | 9170 | 9215 | 9261 | 9306 | 9352         | 9397     | 9442 | 9488    | 9533 |        |
| 49   | 9579          | 9624 | 9670 | 9715 | 9761 | 9806         | 9852     | 9897 | 9943    | 9988 |        |
| 9550 | 980 0034      | 0079 | 0125 | 0170 | 0216 | 0261         | 0307     | 0352 | 0398    | 0443 |        |
| N.   | 0             | 1    | 2    | 3    | 4    | 5            | 6        | 7    | 8       | 9    | P. P.  |
| 9500 | = 26° 23' 20" |      |      |      | 9500 | = 2° 38' 20" | S. 4.685 | 4213 | T. 8821 |      |        |
| 9510 | = 26 25 0     |      |      |      | 9510 | = 2 38 30    |          | 4210 | 8828    |      |        |
| 9520 | = 26 26 40    |      |      |      | 9520 | = 2 38 40    |          | 4207 | 8834    |      |        |
| 9530 | = 26 28 20    |      |      |      | 9530 | = 2 38 50    |          | 4203 | 8840    |      |        |
| 9540 | = 26 30 0     |      |      |      | 9540 | = 2 39 0     |          | 4200 | 8847    |      |        |



| N.   | 0             | 1          | 2         | 3          | 4          | 5                  | 6               | 7               | 8               | 9               | P. P.     |
|------|---------------|------------|-----------|------------|------------|--------------------|-----------------|-----------------|-----------------|-----------------|-----------|
| 9550 | 980 0034      | 0079       | 0125      | 0170       | 0216       | 0261               | 0307            | 0352            | 0398            | 0443            |           |
| 51   | 0488          | 0534       | 0579      | 0625       | 0670       | 0716               | 0761            | 0807            | 0852            | 0898            |           |
| 52   | 0943          | 0989       | 1034      | 1080       | 1125       | 1170               | 1216            | 1261            | 1307            | 1352            |           |
| 53   | 1398          | 1443       | 1489      | 1534       | 1580       | 1625               | 1671            | 1716            | 1761            | 1807            |           |
| 54   | 1852          | 1898       | 1943      | 1989       | 2034       | 2080               | 2125            | 2171            | 2216            | 2261            |           |
| 55   | 2307          | 2352       | 2398      | 2443       | 2489       | 2534               | 2580            | 2625            | 2671            | 2716            |           |
| 56   | 2761          | 2807       | 2852      | 2898       | 2943       | 2989               | 3034            | 3080            | 3125            | 3170            |           |
| 57   | 3216          | 3261       | 3307      | 3352       | 3398       | 3443               | 3489            | 3534            | 3579            | 3625            |           |
| 58   | 3670          | 3716       | 3761      | 3807       | 3852       | 3897               | 3943            | 3988            | 4034            | 4079            |           |
| 59   | 4125          | 4170       | 4215      | 4261       | 4306       | 4352               | 4397            | 4443            | 4488            | 4533            |           |
| 9560 | 980 4579      | 4624       | 4670      | 4715       | 4761       | 4806               | 4851            | 4897            | 4942            | 4988            |           |
| 61   | 5033          | 5079       | 5124      | 5169       | 5215       | 5260               | 5306            | 5351            | 5397            | 5442            | 46        |
| 62   | 5487          | 5533       | 5578      | 5624       | 5669       | 5714               | 5760            | 5805            | 5851            | 5896            | 1 4.6     |
| 63   | 5942          | 5987       | 6032      | 6078       | 6123       | 6169               | 6214            | 6259            | 6305            | 6350            | 2 9.2     |
| 64   | 6396          | 6441       | 6486      | 6532       | 6577       | 6623               | 6668            | 6714            | 6759            | 6804            | 3 13.8    |
| 65   | 6850          | 6895       | 6941      | 6986       | 7031       | 7077               | 7122            | 7168            | 7213            | 7258            | 4 18.4    |
| 66   | 7304          | 7349       | 7395      | 7440       | 7485       | 7531               | 7576            | 7622            | 7667            | 7712            | 5 23.0    |
| 67   | 7758          | 7803       | 7849      | 7894       | 7939       | 7985               | 8030            | 8075            | 8121            | 8166            | 6 27.6    |
| 68   | 8212          | 8257       | 8302      | 8348       | 8393       | 8439               | 8484            | 8529            | 8575            | 8620            | 7 32.2    |
| 69   | 8666          | 8711       | 8756      | 8802       | 8847       | 8892               | 8938            | 8983            | 9029            | 9074            | 8 36.8    |
| 9570 | 980 9119      | 9165       | 9210      | 9256       | 9301       | 9346               | 9392            | 9437            | 9482            | 9528            | 9 41.4    |
| 71   | 9573          | 9619       | 9664      | 9709       | 9755       | 9800               | 9845            | 9891            | 9936            | 9982            |           |
| 72   | 981 0027      | 0072       | 0118      | 0163       | 0208       | 0254               | 0299            | 0344            | 0390            | 0435            |           |
| 73   | 0481          | 0526       | 0571      | 0617       | 0662       | 0707               | 0753            | 0798            | 0844            | 0889            |           |
| 74   | 0934          | 0980       | 1025      | 1070       | 1116       | 1161               | 1206            | 1252            | 1297            | 1342            |           |
| 75   | 1388          | 1433       | 1479      | 1524       | 1569       | 1615               | 1660            | 1705            | 1751            | 1796            |           |
| 76   | 1841          | 1887       | 1932      | 1977       | 2023       | 2068               | 2113            | 2159            | 2204            | 2250            |           |
| 77   | 2295          | 2340       | 2386      | 2431       | 2476       | 2522               | 2567            | 2612            | 2658            | 2703            |           |
| 78   | 2748          | 2794       | 2839      | 2884       | 2930       | 2975               | 3020            | 3066            | 3111            | 3156            |           |
| 79   | 3202          | 3247       | 3292      | 3338       | 3383       | 3428               | 3474            | 3519            | 3564            | 3610            |           |
| 9580 | 981 3655      | 3700       | 3746      | 3791       | 3836       | 3882               | 3927            | 3972            | 4018            | 4063            |           |
| 81   | 4108          | 4154       | 4199      | 4244       | 4290       | 4335               | 4380            | 4426            | 4471            | 4516            | 46        |
| 82   | 4562          | 4607       | 4652      | 4698       | 4743       | 4788               | 4834            | 4879            | 4924            | 4970            | 1 4.5     |
| 83   | 5015          | 5060       | 5106      | 5151       | 5196       | 5241               | 5287            | 5332            | 5377            | 5423            | 2 9.0     |
| 84   | 5468          | 5513       | 5559      | 5604       | 5649       | 5695               | 5740            | 5785            | 5831            | 5876            | 3 13.5    |
| 85   | 5921          | 5966       | 6012      | 6057       | 6102       | 6148               | 6193            | 6238            | 6284            | 6329            | 4 18.0    |
| 86   | 6374          | 6420       | 6465      | 6510       | 6555       | 6601               | 6646            | 6691            | 6737            | 6782            | 5 22.5    |
| 87   | 6827          | 6873       | 6918      | 6963       | 7008       | 7054               | 7099            | 7144            | 7190            | 7235            | 6 27.0    |
| 88   | 7280          | 7326       | 7371      | 7416       | 7461       | 7507               | 7552            | 7597            | 7643            | 7688            | 7 31.5    |
| 89   | 7733          | 7778       | 7824      | 7869       | 7914       | 7960               | 8005            | 8050            | 8095            | 8141            | 8 36.0    |
| 9590 | 981 8186      | 8231       | 8277      | 8322       | 8367       | 8412               | 8458            | 8503            | 8548            | 8594            | 9 40.5    |
| 91   | 8639          | 8684       | 8729      | 8775       | 8820       | 8865               | 8911            | 8956            | 9001            | 9046            |           |
| 92   | 9092          | 9137       | 9182      | 9228       | 9273       | 9318               | 9363            | 9409            | 9454            | 9499            |           |
| 93   | 9544          | 9590       | 9635      | 9680       | 9726       | 9771               | 9816            | 9861            | 9907            | 9952            |           |
| 94   | 9997          | 0042       | 0088      | 0133       | 0178       | 0223               | 0269            | 0314            | 0359            | 0405            |           |
| 95   | 982 0450      | 0495       | 0540      | 0586       | 0631       | 0676               | 0721            | 0767            | 0812            | 0857            |           |
| 96   | 0902          | 0948       | 0993      | 1038       | 1083       | 1129               | 1174            | 1219            | 1264            | 1310            |           |
| 97   | 1355          | 1400       | 1445      | 1491       | 1536       | 1581               | 1626            | 1672            | 1717            | 1762            |           |
| 98   | 1807          | 1853       | 1898      | 1943       | 1988       | 2034               | 2079            | 2124            | 2169            | 2215            |           |
| 99   | 2260          | 2305       | 2350      | 2396       | 2441       | 2486               | 2531            | 2577            | 2622            | 2667            |           |
| 9600 | 982 2712      | 2758       | 2803      | 2848       | 2893       | 2939               | 2984            | 3029            | 3074            | 3119            |           |
| N.   | 0             | 1          | 2         | 3          | 4          | 5                  | 6               | 7               | 8               | 9               | P. P.     |
|      | 95500         | 95600      | 95700     | 95800      | 95900      |                    |                 |                 |                 |                 |           |
|      | = 26° 31' 40" | = 26 33 20 | = 26 35 0 | = 26 36 40 | = 26 38 20 | 9550° = 2° 39' 10" | 9560° = 2 39 20 | 9570° = 2 39 30 | 9580° = 2 39 40 | 9590° = 2 39 50 | S. 4.685  |
|      |               |            |           |            |            |                    |                 |                 |                 |                 | T. 8853   |
|      |               |            |           |            |            |                    |                 |                 |                 |                 | 4194 8860 |
|      |               |            |           |            |            |                    |                 |                 |                 |                 | 4190 8867 |
|      |               |            |           |            |            |                    |                 |                 |                 |                 | 4187 8873 |
|      |               |            |           |            |            |                    |                 |                 |                 |                 | 4184 8880 |



| N.    | 0            | 1    | 2     | 3     | 4     | 5           | 6     | 7     | 8     | 9         | P. P. |          |
|-------|--------------|------|-------|-------|-------|-------------|-------|-------|-------|-----------|-------|----------|
| 0600  | 982 2712     | 2758 | 2803  | 2848  | 2893  | 2939        | 2984  | 3029  | 3074  | 3119      |       |          |
| 01    | 3165         | 3210 | 3255  | 3300  | 3346  | 3391        | 3436  | 3481  | 3527  | 3572      |       |          |
| 02    | 3617         | 3662 | 3707  | 3753  | 3798  | 3843        | 3888  | 3934  | 3979  | 4024      |       |          |
| 03    | 4069         | 4115 | 4160  | 4205  | 4250  | 4295        | 4341  | 4386  | 4431  | 4476      |       |          |
| 04    | 4522         | 4567 | 4612  | 4657  | 4702  | 4748        | 4793  | 4838  | 4883  | 4928      |       |          |
| 05    | 4974         | 5019 | 5064  | 5109  | 5155  | 5200        | 5245  | 5290  | 5335  | 5380      |       |          |
| 06    | 5426         | 5471 | 5516  | 5561  | 5607  | 5652        | 5697  | 5742  | 5787  | 5832      |       |          |
| 07    | 5878         | 5923 | 5968  | 6013  | 6059  | 6104        | 6149  | 6194  | 6239  | 6284      |       |          |
| 08    | 6330         | 6375 | 6420  | 6466  | 6511  | 6556        | 6601  | 6646  | 6691  | 6736      |       |          |
| 09    | 6782         | 6827 | 6872  | 6918  | 6963  | 7008        | 7053  | 7098  | 7143  | 7188      |       |          |
| 0610  | 982 7234     | 7279 | 7324  | 7369  | 7415  | 7460        | 7505  | 7550  | 7595  | 7640      |       |          |
| 11    | 7686         | 7731 | 7776  | 7821  | 7867  | 7912        | 7957  | 8002  | 8047  | 8092      | 40    |          |
| 12    | 8138         | 8183 | 8228  | 8273  | 8318  | 8363        | 8408  | 8453  | 8498  | 8543      | 41    |          |
| 13    | 8589         | 8635 | 8680  | 8725  | 8770  | 8815        | 8860  | 8905  | 8950  | 8995      | 42    |          |
| 14    | 9041         | 9086 | 9131  | 9177  | 9222  | 9267        | 9312  | 9357  | 9402  | 9447      | 43    |          |
| 15    | 9493         | 9538 | 9583  | 9628  | 9673  | 9718        | 9763  | 9808  | 9853  | 9898      | 44    |          |
| 16    | 9945         | 9990 | 10035 | 10080 | 10125 | 10170       | 10215 | 10260 | 10305 | 10350     | 45    |          |
| 17    | 983 0306     | 0341 | 0386  | 0431  | 0477  | 0522        | 0567  | 0612  | 0657  | 0702      | 46    |          |
| 18    | 0848         | 0893 | 0938  | 0983  | 1028  | 1073        | 1118  | 1163  | 1208  | 1253      | 47    |          |
| 19    | 1299         | 1344 | 1389  | 1435  | 1480  | 1525        | 1570  | 1615  | 1660  | 1705      | 48    |          |
| 0620  | 983 1751     | 1796 | 1841  | 1886  | 1931  | 1976        | 2021  | 2066  | 2111  | 2156      |       |          |
| 21    | 2202         | 2247 | 2292  | 2337  | 2382  | 2427        | 2472  | 2517  | 2562  | 2607      |       |          |
| 22    | 2654         | 2699 | 2744  | 2789  | 2834  | 2879        | 2924  | 2969  | 3014  | 3059      |       |          |
| 23    | 3105         | 3150 | 3195  | 3240  | 3285  | 3330        | 3375  | 3420  | 3465  | 3510      |       |          |
| 24    | 3556         | 3601 | 3646  | 3692  | 3737  | 3782        | 3827  | 3872  | 3917  | 3962      |       |          |
| 25    | 4007         | 4053 | 4098  | 4143  | 4188  | 4233        | 4278  | 4323  | 4368  | 4413      |       |          |
| 26    | 4459         | 4504 | 4549  | 4594  | 4639  | 4684        | 4729  | 4774  | 4819  | 4864      |       |          |
| 27    | 4910         | 4955 | 5000  | 5045  | 5090  | 5135        | 5180  | 5225  | 5270  | 5315      |       |          |
| 28    | 5361         | 5406 | 5451  | 5496  | 5541  | 5586        | 5631  | 5676  | 5721  | 5766      |       |          |
| 29    | 5812         | 5857 | 5902  | 5947  | 5992  | 6037        | 6082  | 6127  | 6172  | 6217      |       |          |
| 0630  | 983 6263     | 6308 | 6353  | 6398  | 6443  | 6488        | 6533  | 6578  | 6623  | 6668      |       |          |
| 31    | 6714         | 6759 | 6804  | 6849  | 6894  | 6939        | 6984  | 7029  | 7074  | 7119      | 49    |          |
| 32    | 7165         | 7210 | 7255  | 7300  | 7345  | 7390        | 7435  | 7480  | 7525  | 7570      | 50    |          |
| 33    | 7616         | 7661 | 7706  | 7751  | 7796  | 7841        | 7886  | 7931  | 7976  | 8021      | 51    |          |
| 34    | 8066         | 8111 | 8157  | 8202  | 8247  | 8292        | 8337  | 8382  | 8427  | 8472      | 52    |          |
| 35    | 8517         | 8562 | 8607  | 8652  | 8697  | 8742        | 8787  | 8832  | 8877  | 8922      | 53    |          |
| 36    | 8968         | 9013 | 9058  | 9103  | 9148  | 9193        | 9238  | 9283  | 9328  | 9373      | 54    |          |
| 37    | 9419         | 9464 | 9509  | 9554  | 9599  | 9644        | 9689  | 9734  | 9779  | 9824      | 55    |          |
| 38    | 9869         | 9914 | 9959  | 10004 | 10049 | 10094       | 10139 | 10184 | 10229 | 10274     | 56    |          |
| 39    | 983 0320     | 0365 | 0410  | 0455  | 0500  | 0545        | 0590  | 0635  | 0680  | 0725      | 57    |          |
| 0640  | 984 0770     | 0815 | 0860  | 0905  | 0950  | 0995        | 1040  | 1085  | 1130  | 1175      |       |          |
| 41    | 1221         | 1266 | 1311  | 1356  | 1401  | 1446        | 1491  | 1536  | 1581  | 1626      |       |          |
| 42    | 1671         | 1716 | 1761  | 1806  | 1851  | 1896        | 1941  | 1986  | 2031  | 2076      |       |          |
| 43    | 2122         | 2167 | 2212  | 2257  | 2302  | 2347        | 2392  | 2437  | 2482  | 2527      |       |          |
| 44    | 2572         | 2617 | 2662  | 2707  | 2752  | 2797        | 2842  | 2887  | 2932  | 2977      |       |          |
| 45    | 3022         | 3067 | 3112  | 3157  | 3202  | 3247        | 3292  | 3337  | 3382  | 3427      |       |          |
| 46    | 3473         | 3518 | 3563  | 3608  | 3653  | 3698        | 3743  | 3788  | 3833  | 3878      |       |          |
| 47    | 3923         | 3968 | 4013  | 4058  | 4103  | 4148        | 4193  | 4238  | 4283  | 4328      |       |          |
| 48    | 4373         | 4418 | 4463  | 4508  | 4553  | 4598        | 4643  | 4688  | 4733  | 4778      |       |          |
| 49    | 4823         | 4868 | 4913  | 4958  | 5003  | 5048        | 5093  | 5138  | 5183  | 5228      |       |          |
| 0650  | 984 5273     | 5318 | 5363  | 5408  | 5453  | 5498        | 5543  | 5588  | 5633  | 5678      |       |          |
| N.    | 0            | 1    | 2     | 3     | 4     | 5           | 6     | 7     | 8     | 9         | P. P. |          |
| 96000 | = 26° 40' 0" |      |       |       | 96000 | = 2° 40' 0" |       |       |       | 8. 4 53 3 | 41 81 | T. 88 86 |
| 96100 | = 26 41 40   |      |       |       | 96100 | = 2 40 10   |       |       |       | 41 77     | 88 93 |          |
| 96200 | = 26 43 20   |      |       |       | 96200 | = 2 40 20   |       |       |       | 41 74     | 88 99 |          |
| 96300 | = 26 45 0    |      |       |       | 96300 | = 2 40 30   |       |       |       | 41 71     | 89 06 |          |
| 96400 | = 26 46 40   |      |       |       | 96400 | = 2 40 40   |       |       |       | 41 68     | 89 12 |          |



| N.   | 0                    | 1    | 2    | 3    | 4                  | 5    | 6    | 7        | 8    | 9       | P. P.  |
|------|----------------------|------|------|------|--------------------|------|------|----------|------|---------|--------|
| 9650 | 984 5273             | 5318 | 5363 | 5408 | 5453               | 5498 | 5543 | 5588     | 5633 | 5678    |        |
| 51   | 5723                 | 5768 | 5813 | 5858 | 5903               | 5948 | 5993 | 6038     | 6083 | 6128    |        |
| 52   | 6173                 | 6218 | 6263 | 6308 | 6353               | 6398 | 6443 | 6488     | 6533 | 6578    |        |
| 53   | 6623                 | 6668 | 6713 | 6758 | 6803               | 6848 | 6893 | 6938     | 6983 | 7028    |        |
| 54   | 7073                 | 7118 | 7163 | 7208 | 7253               | 7298 | 7343 | 7388     | 7433 | 7478    |        |
| 55   | 7523                 | 7568 | 7613 | 7658 | 7703               | 7748 | 7793 | 7838     | 7883 | 7928    |        |
| 56   | 7973                 | 8018 | 8063 | 8107 | 8152               | 8197 | 8242 | 8287     | 8332 | 8377    |        |
| 57   | 8422                 | 8467 | 8512 | 8557 | 8602               | 8647 | 8692 | 8737     | 8782 | 8827    |        |
| 58   | 8872                 | 8917 | 8962 | 9007 | 9052               | 9097 | 9142 | 9187     | 9232 | 9277    |        |
| 59   | 9322                 | 9367 | 9412 | 9457 | 9502               | 9546 | 9591 | 9636     | 9681 | 9726    |        |
| 9660 | 984 9771             | 9816 | 9861 | 9906 | 9951               | 9996 | 8041 | 8086     | 8131 | 8176    |        |
| 61   | 985 0221             | 0266 | 0311 | 0356 | 0401               | 0446 | 0491 | 0535     | 0580 | 0625    | 46     |
| 62   | 0670                 | 0715 | 0760 | 0805 | 0850               | 0895 | 0940 | 0985     | 1030 | 1075    | 1 4.5  |
| 63   | 1120                 | 1165 | 1210 | 1255 | 1300               | 1345 | 1389 | 1434     | 1479 | 1524    | 2 9.0  |
| 64   | 1569                 | 1614 | 1659 | 1704 | 1749               | 1794 | 1839 | 1884     | 1929 | 1974    | 3 13.5 |
| 65   | 2019                 | 2064 | 2108 | 2153 | 2198               | 2243 | 2288 | 2333     | 2378 | 2423    | 4 18.0 |
| 66   | 2468                 | 2513 | 2558 | 2603 | 2648               | 2693 | 2737 | 2782     | 2827 | 2872    | 5 22.5 |
| 67   | 2917                 | 2962 | 3007 | 3052 | 3097               | 3142 | 3187 | 3232     | 3277 | 3321    | 6 27.0 |
| 68   | 3366                 | 3411 | 3456 | 3501 | 3546               | 3591 | 3636 | 3681     | 3726 | 3771    | 7 31.5 |
| 69   | 3816                 | 3861 | 3905 | 3950 | 3995               | 4040 | 4085 | 4130     | 4175 | 4220    | 8 36.0 |
| 9670 | 985 4265             | 4310 | 4355 | 4399 | 4444               | 4489 | 4534 | 4579     | 4624 | 4669    | 9 40.5 |
| 71   | 4714                 | 4759 | 4804 | 4849 | 4893               | 4938 | 4983 | 5028     | 5073 | 5118    |        |
| 72   | 5163                 | 5208 | 5253 | 5298 | 5342               | 5387 | 5432 | 5477     | 5522 | 5567    |        |
| 73   | 5612                 | 5657 | 5702 | 5747 | 5791               | 5836 | 5881 | 5926     | 5971 | 6016    |        |
| 74   | 6061                 | 6106 | 6151 | 6196 | 6240               | 6285 | 6330 | 6375     | 6420 | 6465    |        |
| 75   | 6510                 | 6555 | 6600 | 6644 | 6689               | 6734 | 6779 | 6824     | 6869 | 6914    |        |
| 76   | 6959                 | 7003 | 7048 | 7093 | 7138               | 7183 | 7228 | 7273     | 7318 | 7363    |        |
| 77   | 7407                 | 7452 | 7497 | 7542 | 7587               | 7632 | 7677 | 7722     | 7766 | 7811    |        |
| 78   | 7856                 | 7901 | 7946 | 7991 | 8036               | 8081 | 8125 | 8170     | 8215 | 8260    |        |
| 79   | 8305                 | 8350 | 8395 | 8440 | 8484               | 8529 | 8574 | 8619     | 8664 | 8709    |        |
| 9680 | 985 8754             | 8798 | 8843 | 8888 | 8933               | 8978 | 9023 | 9068     | 9112 | 9157    |        |
| 81   | 9202                 | 9247 | 9292 | 9337 | 9382               | 9426 | 9471 | 9516     | 9561 | 9606    | 44     |
| 82   | 9651                 | 9696 | 9740 | 9785 | 9830               | 9875 | 9920 | 9965     | 8010 | 8054    | 1 4.4  |
| 83   | 986 0099             | 0144 | 0189 | 0234 | 0279               | 0324 | 0368 | 0413     | 0458 | 0503    | 2 8.8  |
| 84   | 0548                 | 0593 | 0637 | 0682 | 0727               | 0772 | 0817 | 0862     | 0907 | 0951    | 3 13.2 |
| 85   | 0996                 | 1041 | 1086 | 1131 | 1176               | 1220 | 1265 | 1310     | 1355 | 1400    | 4 17.6 |
| 86   | 1445                 | 1489 | 1534 | 1579 | 1624               | 1669 | 1714 | 1758     | 1803 | 1848    | 5 22.0 |
| 87   | 1893                 | 1938 | 1983 | 2027 | 2072               | 2117 | 2162 | 2207     | 2252 | 2296    | 6 26.4 |
| 88   | 2341                 | 2386 | 2431 | 2476 | 2521               | 2565 | 2610 | 2655     | 2700 | 2745    | 7 30.8 |
| 89   | 2790                 | 2834 | 2879 | 2924 | 2969               | 3014 | 3058 | 3103     | 3148 | 3193    | 8 35.2 |
| 9690 | 986 3238             | 3283 | 3327 | 3372 | 3417               | 3462 | 3507 | 3551     | 3596 | 3641    | 9 39.6 |
| 91   | 3686                 | 3731 | 3776 | 3820 | 3865               | 3910 | 3955 | 4000     | 4044 | 4089    |        |
| 92   | 4134                 | 4179 | 4224 | 4268 | 4313               | 4358 | 4403 | 4448     | 4493 | 4537    |        |
| 93   | 4582                 | 4627 | 4672 | 4717 | 4761               | 4806 | 4851 | 4896     | 4941 | 4985    |        |
| 94   | 5030                 | 5075 | 5120 | 5165 | 5209               | 5254 | 5299 | 5344     | 5389 | 5433    |        |
| 95   | 5478                 | 5523 | 5568 | 5613 | 5657               | 5702 | 5747 | 5792     | 5836 | 5881    |        |
| 96   | 5926                 | 5971 | 6016 | 6060 | 6105               | 6150 | 6195 | 6240     | 6284 | 6329    |        |
| 97   | 6374                 | 6419 | 6464 | 6508 | 6553               | 6598 | 6643 | 6687     | 6732 | 6777    |        |
| 98   | 6822                 | 6867 | 6911 | 6956 | 7001               | 7046 | 7090 | 7135     | 7180 | 7225    |        |
| 99   | 7270                 | 7314 | 7359 | 7404 | 7449               | 7493 | 7538 | 7583     | 7628 | 7673    |        |
| 9700 | 986 7717             | 7762 | 7807 | 7852 | 7896               | 7941 | 7986 | 8031     | 8076 | 8120    |        |
| N.   | 0                    | 1    | 2    | 3    | 4                  | 5    | 6    | 7        | 8    | 9       | P. P.  |
|      | 96500° = 26° 48' 20" |      |      |      | 9650° = 2° 40' 50" |      |      | S. 4.685 | 4164 | T. 8919 |        |
|      | 96600° = 26 50 0     |      |      |      | 9660° = 2 41 0     |      |      |          | 4161 | 8925    |        |
|      | 96700° = 26 51 40    |      |      |      | 9670° = 2 41 10    |      |      |          | 4158 | 8932    |        |
|      | 96800° = 26 53 20    |      |      |      | 9680° = 2 41 20    |      |      |          | 4154 | 8939    |        |
|      | 96900° = 26 55 0     |      |      |      | 9690° = 2 41 30    |      |      |          | 4151 | 8945    |        |



| N.   | 0                   | 1    | 2    | 3    | 4                  | 5    | 6    | 7        | 8    | 9       | P. P.  |
|------|---------------------|------|------|------|--------------------|------|------|----------|------|---------|--------|
| 9700 | 986 7717            | 7762 | 7807 | 7852 | 7896               | 7941 | 7986 | 8031     | 8076 | 8120    |        |
| 01   | 8165                | 8210 | 8255 | 8299 | 8344               | 8389 | 8434 | 8478     | 8523 | 8568    |        |
| 02   | 8613                | 8657 | 8702 | 8747 | 8792               | 8837 | 8881 | 8926     | 8971 | 9016    |        |
| 03   | 9060                | 9105 | 9150 | 9195 | 9239               | 9284 | 9329 | 9374     | 9418 | 9463    |        |
| 04   | 9508                | 9553 | 9597 | 9642 | 9687               | 9732 | 9776 | 9821     | 9866 | 9911    |        |
| 05   | 9955                | 0000 | 0045 | 0090 | 0134               | 0179 | 0224 | 0269     | 0313 | 0358    |        |
| 06   | 987 0403            | 0448 | 0492 | 0537 | 0582               | 0627 | 0671 | 0716     | 0761 | 0806    |        |
| 07   | 0850                | 0895 | 0940 | 0985 | 1029               | 1074 | 1119 | 1163     | 1208 | 1253    |        |
| 08   | 1298                | 1342 | 1387 | 1432 | 1477               | 1521 | 1566 | 1611     | 1656 | 1700    |        |
| 09   | 1745                | 1790 | 1834 | 1879 | 1924               | 1969 | 2013 | 2058     | 2103 | 2148    |        |
| 9710 | 987 2192            | 2237 | 2282 | 2326 | 2371               | 2416 | 2461 | 2505     | 2550 | 2595    |        |
| 11   | 2640                | 2684 | 2729 | 2774 | 2818               | 2863 | 2908 | 2953     | 2997 | 3042    | 45     |
| 12   | 3087                | 3131 | 3176 | 3221 | 3266               | 3310 | 3355 | 3400     | 3444 | 3489    | 1 4.5  |
| 13   | 3534                | 3579 | 3623 | 3668 | 3713               | 3757 | 3802 | 3847     | 3892 | 3936    | 2 9.0  |
| 14   | 3981                | 4026 | 4070 | 4115 | 4160               | 4205 | 4249 | 4294     | 4339 | 4383    | 3 13.5 |
| 15   | 4428                | 4473 | 4517 | 4562 | 4607               | 4652 | 4696 | 4741     | 4786 | 4830    | 4 18.0 |
| 16   | 4875                | 4920 | 4964 | 5009 | 5054               | 5099 | 5143 | 5188     | 5233 | 5277    | 5 22.5 |
| 17   | 5322                | 5367 | 5411 | 5456 | 5501               | 5545 | 5590 | 5635     | 5680 | 5724    | 6 27.0 |
| 18   | 5769                | 5814 | 5858 | 5903 | 5948               | 5992 | 6037 | 6082     | 6126 | 6171    | 7 31.5 |
| 19   | 6216                | 6261 | 6305 | 6350 | 6395               | 6439 | 6484 | 6529     | 6573 | 6618    | 8 36.0 |
| 9720 | 987 6663            | 6707 | 6752 | 6797 | 6841               | 6886 | 6931 | 6975     | 7020 | 7065    | 9 40.5 |
| 21   | 7109                | 7154 | 7199 | 7243 | 7288               | 7333 | 7377 | 7422     | 7467 | 7511    |        |
| 22   | 7556                | 7601 | 7646 | 7690 | 7735               | 7780 | 7824 | 7869     | 7914 | 7958    |        |
| 23   | 8003                | 8048 | 8092 | 8137 | 8182               | 8226 | 8271 | 8316     | 8360 | 8405    |        |
| 24   | 8450                | 8494 | 8539 | 8583 | 8628               | 8673 | 8717 | 8762     | 8807 | 8851    |        |
| 25   | 8896                | 8941 | 8985 | 9030 | 9075               | 9119 | 9164 | 9209     | 9253 | 9298    |        |
| 26   | 9343                | 9387 | 9432 | 9477 | 9521               | 9566 | 9611 | 9655     | 9700 | 9745    |        |
| 27   | 9789                | 9834 | 9878 | 9923 | 9968               | 0012 | 0057 | 0102     | 0146 | 0191    |        |
| 28   | 988 0236            | 0280 | 0325 | 0370 | 0414               | 0459 | 0503 | 0548     | 0593 | 0637    |        |
| 29   | 0682                | 0727 | 0771 | 0816 | 0861               | 0905 | 0950 | 0994     | 1039 | 1084    |        |
| 9730 | 988 1128            | 1173 | 1218 | 1262 | 1307               | 1352 | 1396 | 1441     | 1485 | 1530    |        |
| 31   | 1575                | 1619 | 1664 | 1709 | 1753               | 1798 | 1842 | 1887     | 1932 | 1976    | 14     |
| 32   | 2021                | 2066 | 2110 | 2155 | 2200               | 2244 | 2289 | 2333     | 2378 | 2423    | 1 4.4  |
| 33   | 2467                | 2512 | 2556 | 2601 | 2646               | 2690 | 2735 | 2780     | 2824 | 2869    | 2 8.8  |
| 34   | 2913                | 2958 | 3003 | 3047 | 3092               | 3136 | 3181 | 3226     | 3270 | 3315    | 3 13.2 |
| 35   | 3360                | 3404 | 3449 | 3493 | 3538               | 3583 | 3627 | 3672     | 3716 | 3762    | 4 17.6 |
| 36   | 3806                | 3850 | 3895 | 3939 | 3984               | 4029 | 4073 | 4118     | 4162 | 4207    | 5 22.0 |
| 37   | 4252                | 4296 | 4341 | 4386 | 4430               | 4475 | 4519 | 4564     | 4609 | 4653    | 6 26.4 |
| 38   | 4698                | 4742 | 4787 | 4831 | 4876               | 4921 | 4965 | 5010     | 5054 | 5099    | 7 30.8 |
| 39   | 5144                | 5188 | 5233 | 5277 | 5322               | 5367 | 5411 | 5456     | 5500 | 5545    | 8 35.2 |
| 9740 | 988 5590            | 5634 | 5679 | 5723 | 5768               | 5813 | 5857 | 5902     | 5946 | 5991    | 9 39.6 |
| 41   | 6035                | 6080 | 6125 | 6169 | 6214               | 6258 | 6303 | 6348     | 6392 | 6437    |        |
| 42   | 6481                | 6526 | 6570 | 6615 | 6660               | 6704 | 6749 | 6793     | 6838 | 6882    |        |
| 43   | 6927                | 6972 | 7016 | 7061 | 7105               | 7150 | 7194 | 7239     | 7284 | 7328    |        |
| 44   | 7373                | 7417 | 7462 | 7506 | 7551               | 7596 | 7640 | 7685     | 7729 | 7774    |        |
| 45   | 7818                | 7863 | 7908 | 7952 | 7997               | 8041 | 8086 | 8130     | 8175 | 8220    |        |
| 46   | 8264                | 8309 | 8353 | 8398 | 8442               | 8487 | 8531 | 8576     | 8621 | 8665    |        |
| 47   | 8710                | 8754 | 8799 | 8843 | 8888               | 8932 | 8977 | 9022     | 9066 | 9111    |        |
| 48   | 9155                | 9200 | 9244 | 9289 | 9333               | 9378 | 9423 | 9467     | 9512 | 9556    |        |
| 49   | 9601                | 9645 | 9690 | 9734 | 9779               | 9823 | 9868 | 9913     | 9957 | 0002    |        |
| 9750 | 989 0046            | 0091 | 0135 | 0180 | 0224               | 0269 | 0313 | 0358     | 0402 | 0447    |        |
| N.   | 0                   | 1    | 2    | 3    | 4                  | 5    | 6    | 7        | 8    | 9       | P. P.  |
|      | 9700° = 26° 56' 40" |      |      |      | 9700° = 2° 41' 45" |      |      | S. 4.685 | 4148 | T. 8052 |        |
|      | 97100 = 26 58 20    |      |      |      | 9710 = 2 41 50     |      |      |          | 4144 | 8958    |        |
|      | 97200 = 27 0 0      |      |      |      | 9720 = 2 42 0      |      |      |          | 4141 | 8965    |        |
|      | 97300 = 27 1 40     |      |      |      | 9730 = 2 42 10     |      |      |          | 4138 | 8972    |        |
|      | 97400 = 27 3 20     |      |      |      | 9740 = 2 42 20     |      |      |          | 4135 | 8978    |        |



| N.   | 0         | 1    | 2           | 3        | 4    | 5       | 6    | 7    | 8    | 9    | P. P.  |
|------|-----------|------|-------------|----------|------|---------|------|------|------|------|--------|
| 9750 | 989 0046  | 0091 | 0135        | 0180     | 0224 | 0269    | 0313 | 0358 | 0402 | 0447 |        |
| 51   | 0492      | 0536 | 0581        | 0625     | 0670 | 0714    | 0759 | 0803 | 0848 | 0892 |        |
| 52   | 0937      | 0981 | 1026        | 1071     | 1115 | 1160    | 1204 | 1249 | 1293 | 1338 |        |
| 53   | 1382      | 1427 | 1471        | 1516     | 1560 | 1605    | 1649 | 1694 | 1738 | 1783 |        |
| 54   | 1828      | 1872 | 1917        | 1961     | 2006 | 2050    | 2095 | 2139 | 2184 | 2228 |        |
| 55   | 2273      | 2317 | 2362        | 2406     | 2451 | 2495    | 2540 | 2584 | 2629 | 2673 |        |
| 56   | 2718      | 2762 | 2807        | 2851     | 2896 | 2940    | 2985 | 3030 | 3074 | 3119 |        |
| 57   | 3163      | 3208 | 3252        | 3297     | 3341 | 3386    | 3430 | 3475 | 3519 | 3564 |        |
| 58   | 3608      | 3653 | 3697        | 3742     | 3786 | 3831    | 3875 | 3920 | 3964 | 4009 |        |
| 59   | 4053      | 4098 | 4142        | 4187     | 4231 | 4276    | 4320 | 4365 | 4409 | 4454 |        |
| 9760 | 989 4498  | 4543 | 4587        | 4632     | 4676 | 4721    | 4765 | 4810 | 4854 | 4899 |        |
| 61   | 4943      | 4988 | 5032        | 5077     | 5121 | 5166    | 5210 | 5255 | 5299 | 5344 | 45     |
| 62   | 5388      | 5433 | 5477        | 5521     | 5566 | 5610    | 5655 | 5699 | 5744 | 5788 | 1 4.5  |
| 63   | 5833      | 5877 | 5922        | 5966     | 6011 | 6055    | 6100 | 6144 | 6189 | 6233 | 2 9.0  |
| 64   | 6278      | 6322 | 6367        | 6411     | 6456 | 6500    | 6545 | 6589 | 6634 | 6678 | 3 13.5 |
| 65   | 6722      | 6767 | 6811        | 6856     | 6900 | 6945    | 6989 | 7034 | 7078 | 7123 | 4 18.0 |
| 66   | 7167      | 7212 | 7256        | 7301     | 7345 | 7390    | 7434 | 7478 | 7523 | 7567 | 5 22.5 |
| 67   | 7612      | 7656 | 7701        | 7745     | 7790 | 7834    | 7879 | 7923 | 7968 | 8012 | 6 27.0 |
| 68   | 8057      | 8101 | 8145        | 8190     | 8234 | 8279    | 8323 | 8368 | 8412 | 8457 | 7 31.5 |
| 69   | 8501      | 8546 | 8590        | 8634     | 8679 | 8723    | 8768 | 8812 | 8857 | 8901 | 8 36.0 |
| 9770 | 989 8946  | 8990 | 9035        | 9079     | 9123 | 9168    | 9212 | 9257 | 9301 | 9346 | 9 40.5 |
| 71   | 9390      | 9435 | 9479        | 9523     | 9568 | 9612    | 9657 | 9701 | 9746 | 9790 |        |
| 72   | 9835      | 9879 | 9923        | 9968     | 0012 | 0057    | 0101 | 0146 | 0190 | 0235 |        |
| 73   | 990 0279  | 0323 | 0368        | 0412     | 0457 | 0501    | 0546 | 0590 | 0634 | 0679 |        |
| 74   | 0723      | 0768 | 0812        | 0857     | 0901 | 0946    | 0990 | 1034 | 1079 | 1123 |        |
| 75   | 1168      | 1212 | 1257        | 1301     | 1345 | 1390    | 1434 | 1479 | 1523 | 1568 |        |
| 76   | 1612      | 1656 | 1701        | 1745     | 1790 | 1834    | 1878 | 1923 | 1967 | 2012 |        |
| 77   | 2056      | 2101 | 2145        | 2189     | 2234 | 2278    | 2323 | 2367 | 2411 | 2456 |        |
| 78   | 2500      | 2545 | 2589        | 2634     | 2678 | 2722    | 2767 | 2811 | 2856 | 2900 |        |
| 79   | 2944      | 2989 | 3033        | 3078     | 3122 | 3167    | 3211 | 3255 | 3300 | 3344 |        |
| 9780 | 990 3389  | 3433 | 3477        | 3522     | 3566 | 3611    | 3655 | 3699 | 3744 | 3788 |        |
| 81   | 3833      | 3877 | 3921        | 3966     | 4010 | 4055    | 4099 | 4143 | 4188 | 4232 | 44     |
| 82   | 4277      | 4321 | 4365        | 4410     | 4454 | 4499    | 4543 | 4587 | 4632 | 4676 | 1 4.4  |
| 83   | 4721      | 4765 | 4809        | 4854     | 4898 | 4942    | 4987 | 5031 | 5076 | 5120 | 2 8.8  |
| 84   | 5164      | 5209 | 5253        | 5298     | 5342 | 5386    | 5431 | 5475 | 5520 | 5564 | 3 13.2 |
| 85   | 5608      | 5653 | 5697        | 5741     | 5786 | 5830    | 5875 | 5919 | 5963 | 6008 | 4 17.6 |
| 86   | 6052      | 6096 | 6141        | 6185     | 6230 | 6274    | 6318 | 6363 | 6407 | 6452 | 5 22.0 |
| 87   | 6496      | 6540 | 6585        | 6629     | 6673 | 6718    | 6762 | 6806 | 6851 | 6895 | 6 26.4 |
| 88   | 6940      | 6984 | 7028        | 7073     | 7117 | 7161    | 7206 | 7250 | 7295 | 7339 | 7 30.8 |
| 89   | 7383      | 7428 | 7472        | 7516     | 7561 | 7605    | 7649 | 7694 | 7738 | 7783 | 8 35.2 |
| 9790 | 990 7827  | 7871 | 7916        | 7960     | 8004 | 8049    | 8093 | 8137 | 8182 | 8226 | 9 39.6 |
| 91   | 8271      | 8315 | 8359        | 8404     | 8448 | 8492    | 8537 | 8581 | 8625 | 8670 |        |
| 92   | 8714      | 8758 | 8803        | 8847     | 8891 | 8936    | 8980 | 9025 | 9069 | 9113 |        |
| 93   | 9158      | 9202 | 9246        | 9291     | 9335 | 9379    | 9424 | 9468 | 9512 | 9557 |        |
| 94   | 9601      | 9645 | 9690        | 9734     | 9778 | 9823    | 9867 | 9911 | 9956 | 0000 |        |
| 95   | 991 0044  | 0089 | 0133        | 0177     | 0222 | 0266    | 0310 | 0355 | 0399 | 0443 |        |
| 96   | 0488      | 0532 | 0576        | 0621     | 0665 | 0709    | 0754 | 0798 | 0842 | 0887 |        |
| 97   | 0931      | 0975 | 1020        | 1064     | 1108 | 1153    | 1197 | 1241 | 1286 | 1330 |        |
| 98   | 1374      | 1419 | 1463        | 1507     | 1552 | 1596    | 1640 | 1685 | 1729 | 1773 |        |
| 99   | 1818      | 1862 | 1906        | 1951     | 1995 | 2039    | 2083 | 2128 | 2172 | 2216 |        |
| 9800 | 991 2211  | 2305 | 2349        | 2394     | 2438 | 2482    | 2527 | 2571 | 2615 | 2660 |        |
| N.   | 0         | 1    | 2           | 3        | 4    | 5       | 6    | 7    | 8    | 9    | P. P.  |
| 9750 | 27° 5' 0" | 9750 | 27° 42' 30" | S. 4.685 | 4131 | T. 8985 |      |      |      |      |        |
| 9760 | 27 6 40   | 9760 | 2 44 40     |          | 4128 | 8992    |      |      |      |      |        |
| 9770 | 27 8 20   | 9770 | 2 44 50     |          | 4125 | 8998    |      |      |      |      |        |
| 9780 | 27 10 0   | 9780 | 2 43 0      |          | 4121 | 9005    |      |      |      |      |        |
| 9790 | 27 11 40  | 9790 | 2 43 10     |          | 4118 | 9012    |      |      |      |      |        |



| N.                  | 0        | 1    | 2     | 3     | 4                  | 5     | 6     | 7       | 8     | 9       | P. P.  |
|---------------------|----------|------|-------|-------|--------------------|-------|-------|---------|-------|---------|--------|
| 9800                | 991 2261 | 2305 | 2349  | 2394  | 2438               | 2482  | 2527  | 2571    | 2615  | 2660    |        |
| 01                  | 2704     | 2748 | 2793  | 2837  | 2881               | 2925  | 2970  | 3014    | 3058  | 3103    |        |
| 02                  | 3147     | 3191 | 3236  | 3280  | 3324               | 3369  | 3413  | 3457    | 3501  | 3546    |        |
| 03                  | 3590     | 3634 | 3679  | 3723  | 3767               | 3812  | 3856  | 3900    | 3944  | 3989    |        |
| 04                  | 4033     | 4077 | 4122  | 4166  | 4210               | 4255  | 4299  | 4343    | 4387  | 4432    |        |
| 05                  | 4476     | 4520 | 4565  | 4609  | 4653               | 4697  | 4742  | 4786    | 4830  | 4875    |        |
| 06                  | 4919     | 4963 | 5007  | 5052  | 5096               | 5140  | 5185  | 5229    | 5273  | 5317    |        |
| 07                  | 5362     | 5406 | 5450  | 5495  | 5539               | 5583  | 5627  | 5672    | 5716  | 5760    |        |
| 08                  | 5805     | 5849 | 5893  | 5937  | 5982               | 6026  | 6070  | 6115    | 6159  | 6203    |        |
| 09                  | 6247     | 6292 | 6336  | 6380  | 6424               | 6469  | 6513  | 6557    | 6602  | 6646    |        |
| 9810                | 991 6690 | 6734 | 6779  | 6823  | 6867               | 6911  | 6956  | 7000    | 7044  | 7088    |        |
| 11                  | 7133     | 7177 | 7221  | 7266  | 7310               | 7354  | 7398  | 7443    | 7487  | 7531    | 45     |
| 12                  | 7575     | 7620 | 7664  | 7708  | 7752               | 7797  | 7841  | 7885    | 7929  | 7974    | 1 4.5  |
| 13                  | 8018     | 8062 | 8107  | 8151  | 8195               | 8239  | 8284  | 8328    | 8372  | 8416    | 2 9.0  |
| 14                  | 8461     | 8505 | 8549  | 8593  | 8638               | 8682  | 8726  | 8770    | 8815  | 8859    | 3 13.5 |
| 15                  | 8903     | 8947 | 8991  | 9036  | 9080               | 9124  | 9169  | 9213    | 9257  | 9301    | 4 18.0 |
| 16                  | 9345     | 9390 | 9434  | 9478  | 9522               | 9567  | 9611  | 9655    | 9699  | 9744    | 5 22.5 |
| 17                  | 9788     | 9832 | 9876  | 9921  | 9965               | 10009 | 10053 | 10098   | 10142 | 10186   | 6 27.0 |
| 18                  | 992 0230 | 0275 | 0319  | 0363  | 0407               | 0451  | 0496  | 0540    | 0584  | 0628    | 7 31.5 |
| 19                  | 0673     | 0717 | 0761  | 0805  | 0850               | 0894  | 0938  | 0982    | 1026  | 1071    | 8 36.0 |
| 9820                | 992 1115 | 1159 | 1203  | 1248  | 1292               | 1336  | 1380  | 1424    | 1469  | 1513    | 9 40.5 |
| 21                  | 1557     | 1601 | 1646  | 1690  | 1734               | 1778  | 1822  | 1867    | 1911  | 1955    |        |
| 22                  | 1999     | 2044 | 2088  | 2132  | 2176               | 2220  | 2265  | 2309    | 2353  | 2397    |        |
| 23                  | 2441     | 2486 | 2530  | 2574  | 2618               | 2662  | 2707  | 2751    | 2795  | 2839    |        |
| 24                  | 2884     | 2928 | 2972  | 3016  | 3060               | 3105  | 3149  | 3193    | 3237  | 3281    |        |
| 25                  | 3326     | 3370 | 3414  | 3458  | 3502               | 3547  | 3591  | 3635    | 3679  | 3723    |        |
| 26                  | 3768     | 3812 | 3856  | 3900  | 3944               | 3989  | 4033  | 4077    | 4121  | 4165    |        |
| 27                  | 4210     | 4254 | 4298  | 4342  | 4386               | 4431  | 4475  | 4519    | 4563  | 4607    |        |
| 28                  | 4651     | 4696 | 4740  | 4784  | 4828               | 4872  | 4917  | 4961    | 5005  | 5049    |        |
| 29                  | 5093     | 5138 | 5182  | 5226  | 5270               | 5314  | 5358  | 5403    | 5447  | 5491    |        |
| 9830                | 992 5535 | 5579 | 5624  | 5668  | 5712               | 5756  | 5800  | 5844    | 5889  | 5933    |        |
| 31                  | 5977     | 6021 | 6065  | 6109  | 6154               | 6198  | 6242  | 6286    | 6330  | 6375    | 44     |
| 32                  | 6419     | 6463 | 6507  | 6551  | 6595               | 6640  | 6684  | 6728    | 6772  | 6816    | 1 4.4  |
| 33                  | 6860     | 6905 | 6949  | 6993  | 7037               | 7081  | 7125  | 7170    | 7214  | 7258    | 2 8.8  |
| 34                  | 7302     | 7346 | 7390  | 7435  | 7479               | 7523  | 7567  | 7611    | 7655  | 7699    | 3 13.2 |
| 35                  | 7744     | 7788 | 7832  | 7876  | 7920               | 7964  | 8009  | 8053    | 8097  | 8141    | 4 17.6 |
| 36                  | 8185     | 8229 | 8274  | 8318  | 8362               | 8406  | 8450  | 8494    | 8538  | 8583    | 5 22.0 |
| 37                  | 8627     | 8671 | 8715  | 8759  | 8803               | 8847  | 8892  | 8936    | 8980  | 9024    | 6 26.4 |
| 38                  | 9068     | 9112 | 9156  | 9201  | 9245               | 9289  | 9333  | 9377    | 9421  | 9465    | 7 30.8 |
| 39                  | 9510     | 9554 | 9598  | 9642  | 9686               | 9730  | 9774  | 9819    | 9863  | 9907    | 8 35.2 |
| 9840                | 992 9951 | 9995 | 10039 | 10083 | 10128              | 10172 | 10216 | 10260   | 10304 | 10348   | 9 39.6 |
| 41                  | 993 0392 | 0436 | 0481  | 0525  | 0569               | 0613  | 0657  | 0701    | 0745  | 0789    |        |
| 42                  | 0834     | 0878 | 0922  | 0966  | 1010               | 1054  | 1098  | 1142    | 1187  | 1231    |        |
| 43                  | 1275     | 1319 | 1363  | 1407  | 1451               | 1495  | 1540  | 1584    | 1628  | 1672    |        |
| 44                  | 1716     | 1760 | 1804  | 1848  | 1893               | 1937  | 1981  | 2025    | 2069  | 2113    |        |
| 45                  | 2157     | 2201 | 2245  | 2290  | 2334               | 2378  | 2422  | 2466    | 2510  | 2554    |        |
| 46                  | 2598     | 2642 | 2687  | 2731  | 2775               | 2819  | 2863  | 2907    | 2951  | 2995    |        |
| 47                  | 3039     | 3083 | 3128  | 3172  | 3216               | 3260  | 3304  | 3348    | 3392  | 3436    |        |
| 48                  | 3480     | 3524 | 3569  | 3613  | 3657               | 3701  | 3745  | 3789    | 3833  | 3877    |        |
| 49                  | 3921     | 3965 | 4010  | 4054  | 4098               | 4142  | 4186  | 4230    | 4274  | 4318    |        |
| 9850                | 993 4362 | 4406 | 4450  | 4495  | 4539               | 4583  | 4627  | 4671    | 4715  | 4759    |        |
| N.                  | 0        | 1    | 2     | 3     | 4                  | 5     | 6     | 7       | 8     | 9       | P. P.  |
| 9800° = 27° 13' 20" |          |      |       |       | 9800° = 2° 43' 20" |       |       |         |       |         |        |
| 98100 = 27° 15' 0"  |          |      |       |       | 9810 = 2° 43' 30"  |       |       | 8.4.685 | 4115  | T. 9018 |        |
| 98200 = 27° 16' 40" |          |      |       |       | 9820 = 2° 43' 40"  |       |       |         | 4111  | 9025    |        |
| 98300 = 27° 18' 20" |          |      |       |       | 9830 = 2° 43' 50"  |       |       |         | 4108  | 9032    |        |
| 98400 = 27° 20' 0"  |          |      |       |       | 9840 = 2° 44' 0"   |       |       |         | 4105  | 9038    |        |
|                     |          |      |       |       |                    |       |       |         | 4101  | 9045    |        |



| N.    | 0           | 1     | 2          | 3        | 4    | 5       | 6    | 7    | 8    | 9    | P. P.  |
|-------|-------------|-------|------------|----------|------|---------|------|------|------|------|--------|
| 9850  | 993 4362    | 4406  | 4450       | 4495     | 4539 | 4583    | 4627 | 4671 | 4715 | 4759 |        |
| 51    | 4803        | 4847  | 4891       | 4935     | 4980 | 5024    | 5068 | 5112 | 5156 | 5200 |        |
| 52    | 5244        | 5288  | 5332       | 5376     | 5420 | 5464    | 5509 | 5553 | 5597 | 5641 |        |
| 53    | 5685        | 5729  | 5773       | 5817     | 5861 | 5905    | 5949 | 5993 | 6037 | 6082 |        |
| 54    | 6126        | 6170  | 6214       | 6258     | 6302 | 6346    | 6390 | 6434 | 6478 | 6522 |        |
| 55    | 6566        | 6610  | 6654       | 6698     | 6743 | 6787    | 6831 | 6875 | 6919 | 6963 |        |
| 56    | 7007        | 7051  | 7095       | 7139     | 7183 | 7227    | 7271 | 7315 | 7359 | 7404 |        |
| 57    | 7448        | 7492  | 7536       | 7580     | 7624 | 7668    | 7712 | 7756 | 7800 | 7844 |        |
| 58    | 7888        | 7932  | 7976       | 8020     | 8064 | 8108    | 8152 | 8197 | 8241 | 8285 |        |
| 59    | 8329        | 8373  | 8417       | 8461     | 8505 | 8549    | 8593 | 8637 | 8681 | 8725 |        |
| 9860  | 993 8769    | 8813  | 8857       | 8901     | 8945 | 8989    | 9033 | 9077 | 9122 | 9166 |        |
| 61    | 9210        | 9254  | 9298       | 9342     | 9386 | 9430    | 9474 | 9518 | 9562 | 9606 | 44     |
| 62    | 9650        | 9694  | 9738       | 9782     | 9826 | 9870    | 9914 | 9958 | 0002 | 0046 | 1 4.4  |
| 63    | 994 0090    | 0134  | 0178       | 0222     | 0266 | 0310    | 0355 | 0399 | 0443 | 0487 | 2 8.8  |
| 64    | 0531        | 0575  | 0619       | 0663     | 0707 | 0751    | 0795 | 0839 | 0883 | 0927 | 3 13.2 |
| 65    | 0971        | 1015  | 1059       | 1103     | 1147 | 1191    | 1235 | 1279 | 1323 | 1367 | 4 17.6 |
| 66    | 1411        | 1455  | 1499       | 1543     | 1587 | 1631    | 1675 | 1719 | 1763 | 1807 | 5 22.0 |
| 67    | 1851        | 1895  | 1939       | 1983     | 2027 | 2071    | 2115 | 2159 | 2203 | 2247 | 6 30.8 |
| 68    | 2291        | 2335  | 2379       | 2423     | 2467 | 2511    | 2555 | 2599 | 2643 | 2687 | 7 35.2 |
| 69    | 2731        | 2775  | 2820       | 2864     | 2908 | 2952    | 2996 | 3040 | 3084 | 3128 | 8 39.6 |
| 9870  | 994 3172    | 3216  | 3260       | 3304     | 3348 | 3392    | 3436 | 3480 | 3524 | 3568 |        |
| 71    | 3612        | 3656  | 3700       | 3744     | 3788 | 3831    | 3875 | 3919 | 3963 | 4007 |        |
| 72    | 4051        | 4095  | 4139       | 4183     | 4227 | 4271    | 4315 | 4359 | 4403 | 4447 |        |
| 73    | 4491        | 4535  | 4579       | 4623     | 4667 | 4711    | 4755 | 4799 | 4843 | 4887 |        |
| 74    | 4931        | 4975  | 5019       | 5063     | 5107 | 5151    | 5195 | 5239 | 5283 | 5327 |        |
| 75    | 5371        | 5415  | 5459       | 5503     | 5547 | 5591    | 5635 | 5679 | 5723 | 5767 |        |
| 76    | 5811        | 5855  | 5899       | 5943     | 5987 | 6031    | 6075 | 6119 | 6163 | 6207 |        |
| 77    | 6251        | 6295  | 6338       | 6382     | 6426 | 6470    | 6514 | 6558 | 6602 | 6646 |        |
| 78    | 6690        | 6734  | 6778       | 6822     | 6866 | 6910    | 6954 | 6998 | 7042 | 7086 |        |
| 79    | 7130        | 7174  | 7218       | 7262     | 7306 | 7350    | 7394 | 7438 | 7482 | 7525 |        |
| 9880  | 994 7569    | 7613  | 7657       | 7701     | 7745 | 7789    | 7833 | 7877 | 7921 | 7965 |        |
| 81    | 8009        | 8053  | 8097       | 8141     | 8185 | 8229    | 8273 | 8317 | 8361 | 8405 | 43     |
| 82    | 8448        | 8492  | 8536       | 8580     | 8624 | 8668    | 8712 | 8756 | 8800 | 8844 | 1 4.3  |
| 83    | 8888        | 8932  | 8976       | 9020     | 9064 | 9108    | 9152 | 9196 | 9239 | 9283 | 2 8.6  |
| 84    | 9327        | 9371  | 9415       | 9459     | 9503 | 9547    | 9591 | 9635 | 9679 | 9723 | 3 12.9 |
| 85    | 9767        | 9811  | 9855       | 9899     | 9942 | 9986    | 0030 | 0074 | 0118 | 0162 | 4 17.2 |
| 86    | 995 0206    | 0250  | 0294       | 0338     | 0382 | 0426    | 0470 | 0514 | 0557 | 0601 | 5 21.5 |
| 87    | 0645        | 0689  | 0733       | 0777     | 0821 | 0865    | 0909 | 0953 | 0997 | 1041 | 6 25.8 |
| 88    | 1085        | 1128  | 1172       | 1216     | 1260 | 1304    | 1348 | 1392 | 1436 | 1480 | 7 30.1 |
| 89    | 1524        | 1568  | 1612       | 1656     | 1699 | 1743    | 1787 | 1831 | 1875 | 1919 | 8 34.4 |
| 9890  | 995 1963    | 2007  | 2051       | 2095     | 2139 | 2182    | 2226 | 2270 | 2314 | 2358 | 9 38.7 |
| 91    | 2402        | 2446  | 2490       | 2534     | 2578 | 2622    | 2666 | 2709 | 2753 | 2797 |        |
| 92    | 2841        | 2885  | 2929       | 2973     | 3017 | 3061    | 3104 | 3148 | 3192 | 3236 |        |
| 93    | 3280        | 3324  | 3368       | 3412     | 3456 | 3500    | 3543 | 3587 | 3631 | 3675 |        |
| 94    | 3719        | 3763  | 3807       | 3851     | 3895 | 3939    | 3982 | 4026 | 4070 | 4114 |        |
| 95    | 4158        | 4202  | 4246       | 4290     | 4334 | 4377    | 4421 | 4465 | 4509 | 4553 |        |
| 96    | 4597        | 4641  | 4685       | 4729     | 4772 | 4816    | 4860 | 4904 | 4948 | 4992 |        |
| 97    | 5036        | 5080  | 5123       | 5167     | 5211 | 5255    | 5299 | 5343 | 5387 | 5431 |        |
| 98    | 5474        | 5518  | 5562       | 5606     | 5650 | 5694    | 5738 | 5782 | 5825 | 5869 |        |
| 99    | 5913        | 5957  | 6001       | 6045     | 6089 | 6133    | 6176 | 6220 | 6264 | 6308 |        |
| 9900  | 995 6352    | 6396  | 6440       | 6484     | 6527 | 6571    | 6615 | 6659 | 6703 | 6747 |        |
| N.    | 0           | 1     | 2          | 3        | 4    | 5       | 6    | 7    | 8    | 9    | P. P.  |
| 9850' | 27° 21' 40" | 9850' | 2° 44' 10" | S. 4.685 | 4098 | T. 9052 |      |      |      |      |        |
| 9860' | 27 23 20    | 9860' | 2 44 20    |          | 4095 | 9058    |      |      |      |      |        |
| 9870' | 27 25 0     | 9870' | 2 44 30    |          | 4091 | 9065    |      |      |      |      |        |
| 9880' | 27 26 40    | 9880' | 2 44 40    |          | 4088 | 9072    |      |      |      |      |        |
| 9890' | 27 28 20    | 9890' | 2 44 50    |          | 4084 | 9079    |      |      |      |      |        |







| N.    | 0                    | 1    | 2    | 3    | 4                  | 5    | 6        | 7    | 8      | 9    | P. P.  |
|-------|----------------------|------|------|------|--------------------|------|----------|------|--------|------|--------|
| 9950  | 997 8231             | 8274 | 8318 | 8362 | 8405               | 8449 | 8493     | 8536 | 8580   | 8624 |        |
| 51    | 8667                 | 8711 | 8755 | 8798 | 8841               | 8885 | 8929     | 8973 | 9016   | 9060 |        |
| 52    | 9104                 | 9147 | 9191 | 9235 | 9278               | 9322 | 9365     | 9409 | 9453   | 9496 |        |
| 53    | 9540                 | 9584 | 9627 | 9671 | 9715               | 9758 | 9802     | 9845 | 9889   | 9933 |        |
| 54    | 9976                 | 8020 | 8064 | 8107 | 8151               | 8195 | 8238     | 8282 | 8325   | 8369 |        |
| 55    | 998 0413             | 0456 | 0500 | 0544 | 0587               | 0631 | 0674     | 0718 | 0762   | 0805 |        |
| 56    | 0849                 | 0893 | 0936 | 0980 | 1023               | 1067 | 1111     | 1154 | 1198   | 1241 |        |
| 57    | 1285                 | 1329 | 1372 | 1416 | 1460               | 1503 | 1547     | 1590 | 1634   | 1678 |        |
| 58    | 1721                 | 1765 | 1808 | 1852 | 1896               | 1939 | 1983     | 2026 | 2070   | 2114 |        |
| 59    | 2157                 | 2201 | 2245 | 2288 | 2332               | 2375 | 2419     | 2463 | 2506   | 2550 |        |
| 9960  | 998 2593             | 2637 | 2681 | 2724 | 2768               | 2811 | 2855     | 2899 | 2942   | 2986 |        |
| 61    | 3029                 | 3073 | 3117 | 3160 | 3204               | 3247 | 3291     | 3335 | 3378   | 3422 | 44     |
| 62    | 3465                 | 3509 | 3553 | 3596 | 3640               | 3683 | 3727     | 3771 | 3814   | 3858 | 1 4.4  |
| 63    | 3901                 | 3945 | 3988 | 4032 | 4076               | 4119 | 4163     | 4206 | 4250   | 4294 | 2 8.8  |
| 64    | 4337                 | 4381 | 4424 | 4468 | 4512               | 4555 | 4599     | 4642 | 4686   | 4729 | 3 13.2 |
| 65    | 4773                 | 4817 | 4860 | 4904 | 4947               | 4991 | 5035     | 5078 | 5122   | 5165 | 4 17.6 |
| 66    | 5209                 | 5252 | 5296 | 5340 | 5383               | 5427 | 5470     | 5514 | 5557   | 5601 | 5 22.0 |
| 67    | 5645                 | 5688 | 5732 | 5775 | 5819               | 5862 | 5906     | 5950 | 5993   | 6037 | 6 26.4 |
| 68    | 6080                 | 6124 | 6167 | 6211 | 6255               | 6298 | 6342     | 6385 | 6429   | 6472 | 7 30.8 |
| 69    | 6516                 | 6560 | 6603 | 6647 | 6690               | 6734 | 6777     | 6821 | 6864   | 6908 | 8 35.2 |
| 9970  | 998 6952             | 6995 | 7039 | 7082 | 7126               | 7169 | 7213     | 7256 | 7300   | 7344 | 9 39.6 |
| 71    | 7387                 | 7431 | 7474 | 7518 | 7561               | 7605 | 7648     | 7692 | 7736   | 7779 |        |
| 72    | 7823                 | 7866 | 7910 | 7953 | 7997               | 8040 | 8084     | 8128 | 8171   | 8215 |        |
| 73    | 8258                 | 8302 | 8345 | 8389 | 8432               | 8476 | 8519     | 8563 | 8607   | 8650 |        |
| 74    | 8694                 | 8737 | 8781 | 8824 | 8868               | 8911 | 8955     | 8998 | 9042   | 9086 |        |
| 75    | 9129                 | 9173 | 9216 | 9260 | 9303               | 9347 | 9390     | 9434 | 9477   | 9521 |        |
| 76    | 9564                 | 9608 | 9651 | 9695 | 9739               | 9782 | 9826     | 9869 | 9913   | 9956 |        |
| 77    | 999 0000             | 0043 | 0087 | 0130 | 0174               | 0217 | 0261     | 0304 | 0348   | 0391 |        |
| 78    | 0435                 | 0479 | 0522 | 0566 | 0609               | 0653 | 0696     | 0740 | 0783   | 0827 |        |
| 79    | 0870                 | 0914 | 0957 | 1001 | 1044               | 1088 | 1131     | 1175 | 1218   | 1262 |        |
| 9980  | 999 1305             | 1349 | 1392 | 1436 | 1479               | 1523 | 1567     | 1610 | 1654   | 1697 |        |
| 81    | 1741                 | 1784 | 1828 | 1871 | 1915               | 1958 | 2002     | 2045 | 2089   | 2132 | 48     |
| 82    | 2176                 | 2219 | 2263 | 2306 | 2350               | 2393 | 2437     | 2480 | 2524   | 2567 | 1 4.3  |
| 83    | 2611                 | 2654 | 2698 | 2741 | 2785               | 2828 | 2872     | 2915 | 2959   | 3002 | 2 8.6  |
| 84    | 3046                 | 3089 | 3133 | 3176 | 3220               | 3263 | 3307     | 3350 | 3394   | 3437 | 3 12.9 |
| 85    | 3481                 | 3524 | 3568 | 3611 | 3655               | 3698 | 3742     | 3785 | 3829   | 3872 | 4 17.2 |
| 86    | 3916                 | 3959 | 4003 | 4046 | 4090               | 4133 | 4177     | 4220 | 4264   | 4307 | 5 21.5 |
| 87    | 4350                 | 4394 | 4437 | 4481 | 4524               | 4568 | 4611     | 4655 | 4698   | 4742 | 6 25.8 |
| 88    | 4785                 | 4829 | 4872 | 4916 | 4959               | 5003 | 5046     | 5090 | 5133   | 5177 | 7 30.1 |
| 89    | 5220                 | 5264 | 5307 | 5351 | 5394               | 5438 | 5481     | 5524 | 5568   | 5611 | 8 34.4 |
| 9990  | 999 5655             | 5698 | 5742 | 5785 | 5829               | 5872 | 5916     | 5959 | 6003   | 6046 | 9 38.7 |
| 91    | 6090                 | 6133 | 6177 | 6220 | 6263               | 6307 | 6350     | 6394 | 6437   | 6481 |        |
| 92    | 6524                 | 6568 | 6611 | 6655 | 6698               | 6742 | 6785     | 6828 | 6872   | 6915 |        |
| 93    | 6959                 | 7002 | 7046 | 7089 | 7133               | 7176 | 7220     | 7263 | 7307   | 7350 |        |
| 94    | 7393                 | 7437 | 7480 | 7524 | 7567               | 7611 | 7654     | 7698 | 7741   | 7785 |        |
| 95    | 7828                 | 7871 | 7915 | 7958 | 8002               | 8045 | 8089     | 8132 | 8176   | 8219 |        |
| 96    | 8262                 | 8306 | 8349 | 8393 | 8436               | 8480 | 8523     | 8567 | 8610   | 8653 |        |
| 97    | 8697                 | 8740 | 8784 | 8827 | 8871               | 8914 | 8958     | 9001 | 9044   | 9088 |        |
| 98    | 9131                 | 9175 | 9218 | 9262 | 9305               | 9349 | 9392     | 9435 | 9479   | 9522 |        |
| 99    | 9566                 | 9609 | 9653 | 9696 | 9739               | 9783 | 9826     | 9870 | 9913   | 9957 |        |
| 10000 | 000 0000             | 0043 | 0087 | 0130 | 0174               | 0217 | 0261     | 0304 | 0347   | 0391 |        |
| N.    | 0                    | 1    | 2    | 3    | 4                  | 5    | 6        | 7    | 8      | 9    | P. P.  |
|       | 99500° = 27° 38' 20" |      |      |      | 9950° = 2° 45' 50" |      | S. 4.685 | 4064 | T 9119 |      |        |
|       | 99600° = 27° 40' 0"  |      |      |      | 9960° = 2° 46' 0"  |      |          | 4061 | 9126   |      |        |
|       | 99700° = 27° 41' 40" |      |      |      | 9970° = 2° 46' 10" |      |          | 4057 | 9133   |      |        |
|       | 99800° = 27° 43' 20" |      |      |      | 9980° = 2° 46' 20" |      |          | 4054 | 9140   |      |        |
|       | 99900° = 27° 45' 0"  |      |      |      | 9990° = 2° 46' 30" |      |          | 4051 | 9146   |      |        |



| Table for converting natural Logarithms<br>into common Log <sup>s</sup> . |             |     |             | Table for converting common Log <sup>s</sup> .<br>into natural Log <sup>s</sup> . |              |     |              |
|---|-------------|-----|-------------|---|--------------|-----|--------------|
| 0   | 0.000 0000  | 50  | 21.714 7241 | 0   | 0.000 0000   | 50  | 115.129 2546 |
| 1   | 0.434 2945  | 51  | 22.149 0186 | 1   | 2.302 5851   | 51  | 117.431 8397 |
| 2   | 0.868 5890  | 52  | 22.583 3131 | 2   | 4.605 1702   | 52  | 119.734 4248 |
| 3   | 1.302 8834  | 53  | 23.017 6075 | 3   | 6.907 7553   | 53  | 122.037 0099 |
| 4   | 1.737 1779  | 54  | 23.451 9020 | 4   | 9.210 3404   | 54  | 124.339 5950 |
| 5   | 2.171 4724  | 55  | 23.886 1965 | 5   | 11.512 9255  | 55  | 126.642 1801 |
| 6   | 2.605 7669  | 56  | 24.320 4910 | 6   | 13.815 5106  | 56  | 128.944 7652 |
| 7   | 3.040 0614  | 57  | 24.754 7855 | 7   | 16.118 0957  | 57  | 131.247 3503 |
| 8   | 3.474 3559  | 58  | 25.189 0800 | 8   | 18.420 6807  | 58  | 133.549 9354 |
| 9   | 3.908 6503  | 59  | 25.623 3744 | 9   | 20.723 2658  | 59  | 135.852 5205 |
| 10  | 4.342 9448  | 60  | 26.057 6689 | 10  | 23.025 8509  | 60  | 138.155 1056 |
| 11  | 4.777 2393  | 61  | 26.491 9634 | 11  | 25.328 4360  | 61  | 140.457 6907 |
| 12  | 5.211 5338  | 62  | 26.926 2579 | 12  | 27.631 0211  | 62  | 142.760 2758 |
| 13  | 5.645 8283  | 63  | 27.360 5524 | 13  | 29.933 6062  | 63  | 145.062 8609 |
| 14  | 6.080 1227  | 64  | 27.794 8468 | 14  | 32.236 1913  | 64  | 147.365 4460 |
| 15  | 6.514 4172  | 65  | 28.229 1413 | 15  | 34.538 7764  | 65  | 149.668 0310 |
| 16  | 6.948 7117  | 66  | 28.663 4358 | 16  | 36.841 3615  | 66  | 151.970 6161 |
| 17  | 7.383 0062  | 67  | 29.097 7303 | 17  | 39.143 9466  | 67  | 154.273 2012 |
| 18  | 7.817 3007  | 68  | 29.532 0248 | 18  | 41.446 5317  | 68  | 156.575 7863 |
| 19  | 8.251 5952  | 69  | 29.966 3193 | 19  | 43.749 1168  | 69  | 158.878 3714 |
| 20  | 8.685 8896  | 70  | 30.400 6137 | 20  | 46.051 7019  | 70  | 161.180 9565 |
| 21  | 9.120 1841  | 71  | 30.834 9082 | 21  | 48.354 2870  | 71  | 163.483 5416 |
| 22  | 9.554 4786  | 72  | 31.269 2027 | 22  | 50.656 8720  | 72  | 165.786 1267 |
| 23  | 9.988 7731  | 73  | 31.703 4972 | 23  | 52.959 4571  | 73  | 168.088 7118 |
| 24  | 10.423 0676 | 74  | 32.137 7917 | 24  | 55.262 0422  | 74  | 170.391 2969 |
| 25  | 10.857 3620 | 75  | 32.572 0861 | 25  | 57.564 6273  | 75  | 172.693 8820 |
| 26  | 11.291 6565 | 76  | 33.006 3806 | 26  | 59.867 2124  | 76  | 174.996 4671 |
| 27  | 11.725 9510 | 77  | 33.440 6751 | 27  | 62.169 7975  | 77  | 177.299 0522 |
| 28  | 12.160 2455 | 78  | 33.874 9696 | 28  | 64.472 3826  | 78  | 179.601 6373 |
| 29  | 12.594 5400 | 79  | 34.309 2641 | 29  | 66.774 9677  | 79  | 181.904 2223 |
| 30  | 13.028 8345 | 80  | 34.743 5586 | 30  | 69.077 5528  | 80  | 184.206 8074 |
| 31  | 13.463 1289 | 81  | 35.177 8530 | 31  | 71.380 1379  | 81  | 186.509 3925 |
| 32  | 13.897 4234 | 82  | 35.612 1475 | 32  | 73.682 7230  | 82  | 188.811 9776 |
| 33  | 14.331 7179 | 83  | 36.046 4420 | 33  | 75.985 3081  | 83  | 191.114 5627 |
| 34  | 14.766 0124 | 84  | 36.480 7365 | 34  | 78.287 8932  | 84  | 193.417 1478 |
| 35  | 15.200 3069 | 85  | 36.915 0310 | 35  | 80.590 4783  | 85  | 195.719 7329 |
| 36  | 15.634 6013 | 86  | 37.349 3254 | 36  | 82.893 0633  | 86  | 198.022 3180 |
| 37  | 16.068 8958 | 87  | 37.783 6199 | 37  | 85.195 6484  | 87  | 200.324 9031 |
| 38  | 16.503 1903 | 88  | 38.217 9144 | 38  | 87.498 2335  | 88  | 202.627 4882 |
| 39  | 16.937 4848 | 89  | 38.652 2089 | 39  | 89.800 8186  | 89  | 204.930 0733 |
| 40  | 17.371 7793 | 90  | 39.086 5034 | 40  | 92.103 4037  | 90  | 207.232 6584 |
| 41  | 17.806 0738 | 91  | 39.520 7979 | 41  | 94.405 9888  | 91  | 209.535 2435 |
| 42  | 18.240 3682 | 92  | 39.955 0923 | 42  | 96.708 5739  | 92  | 211.837 8286 |
| 43  | 18.674 6627 | 93  | 40.389 3868 | 43  | 99.011 1590  | 93  | 214.140 4136 |
| 44  | 19.108 9572 | 94  | 40.823 6813 | 44  | 101.313 7441 | 94  | 216.442 9987 |
| 45  | 19.543 2517 | 95  | 41.257 9758 | 45  | 103.616 3292 | 95  | 218.745 5838 |
| 46  | 19.977 5462 | 96  | 41.692 2703 | 46  | 105.918 9143 | 96  | 221.048 1689 |
| 47  | 20.411 8406 | 97  | 42.126 5647 | 47  | 108.221 4994 | 97  | 223.350 7540 |
| 48  | 20.846 1351 | 98  | 42.560 8592 | 48  | 110.524 0845 | 98  | 225.653 3391 |
| 49  | 21.280 4296 | 99  | 42.995 1537 | 49  | 112.826 6696 | 99  | 227.955 9242 |
| 50  | 21.714 7241 | 100 | 43.429 4482 | 50  | 115.129 2546 | 100 | 230.258 5093 |

Base of the common Logarithms = 10.000 0000

Base of the natural Logarithms (e) = 2.718 2818

Log. nat. 10. . . . . = 2.302 5851

Log. vulg. 2.718 2818 (e) . . . . . = 0.434 2945



II.

# LOGARITHMS

OF THE

# SINES AND TANGENTS

FROM SECOND TO SECOND.



| "  | 0'         | 1'         | 2'         | 3'         | 4'         | 5'         | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | —          | 6.463 7261 | 6.764 7561 | 6.940 8473 | 7.065 7860 | 7.162 6960 | 60 |
| 1  | 4.685 5749 | 6.470 9047 | 6.768 3602 | 6.943 2534 | 7.067 5918 | 7.164 1412 | 59 |
| 2  | 4.986 6049 | 6.477 9665 | 6.771 9347 | 6.945 6462 | 7.069 3901 | 7.165 5817 | 58 |
| 3  | 5.162 6961 | 6.484 9154 | 6.775 4800 | 6.948 0259 | 7.071 1810 | 7.167 0173 | 57 |
| 4  | 5.287 6349 | 6.491 7548 | 6.778 9965 | 6.950 3926 | 7.072 9646 | 7.168 4483 | 56 |
| 5  | 5.384 5449 | 6.498 4882 | 6.782 4849 | 6.952 7465 | 7.074 7408 | 7.169 8745 | 55 |
| 6  | 5.463 7261 | 6.505 1188 | 6.785 9454 | 6.955 0878 | 7.076 5099 | 7.171 2961 | 54 |
| 7  | 5.530 6729 | 6.511 6497 | 6.789 3786 | 6.957 4164 | 7.078 2717 | 7.172 7131 | 53 |
| 8  | 5.588 6649 | 6.518 0838 | 6.792 7848 | 6.959 7327 | 7.080 0264 | 7.174 1254 | 52 |
| 9  | 5.639 8174 | 6.524 4239 | 6.796 1645 | 6.962 0366 | 7.081 7741 | 7.175 5332 | 51 |
| 10 | 5.685 5749 | 6.530 6729 | 6.799 5182 | 6.964 3284 | 7.083 5148 | 7.176 9364 | 50 |
| 11 | 5.726 9676 | 6.536 8332 | 6.802 8461 | 6.966 6082 | 7.085 2485 | 7.178 3351 | 49 |
| 12 | 5.764 7561 | 6.542 9074 | 6.806 1488 | 6.968 8760 | 7.086 9753 | 7.179 7293 | 48 |
| 13 | 5.799 5182 | 6.548 8977 | 6.809 4265 | 6.971 1321 | 7.088 6953 | 7.181 1190 | 47 |
| 14 | 5.831 7029 | 6.554 8066 | 6.812 6796 | 6.973 3765 | 7.090 4085 | 7.182 5043 | 46 |
| 15 | 5.861 6661 | 6.560 6361 | 6.815 9086 | 6.975 6094 | 7.092 1149 | 7.183 8853 | 45 |
| 16 | 5.889 6949 | 6.566 3884 | 6.819 1137 | 6.977 8309 | 7.093 8147 | 7.185 2618 | 44 |
| 17 | 5.916 0238 | 6.572 0656 | 6.822 2954 | 6.980 0410 | 7.095 5079 | 7.186 6340 | 43 |
| 18 | 5.940 8474 | 6.577 6695 | 6.825 4539 | 6.982 2400 | 7.097 1945 | 7.188 0018 | 42 |
| 19 | 5.964 3285 | 6.583 2019 | 6.828 5896 | 6.984 4279 | 7.098 8745 | 7.189 3654 | 41 |
| 20 | 5.986 6049 | 6.588 6648 | 6.831 7029 | 6.986 6048 | 7.100 5481 | 7.190 7247 | 40 |
| 21 | 6.007 7942 | 6.594 0599 | 6.834 7939 | 6.988 7709 | 7.102 2153 | 7.192 0797 | 39 |
| 22 | 6.027 9975 | 6.599 3887 | 6.837 8632 | 6.990 9262 | 7.103 8760 | 7.193 4306 | 38 |
| 23 | 6.047 3027 | 6.604 9529 | 6.840 9109 | 6.993 0708 | 7.105 5305 | 7.194 7772 | 37 |
| 24 | 6.065 7861 | 6.609 8541 | 6.843 9373 | 6.995 2050 | 7.107 1787 | 7.196 1197 | 36 |
| 25 | 6.083 5149 | 6.614 9938 | 6.846 9428 | 6.997 3287 | 7.108 8206 | 7.197 4580 | 35 |
| 26 | 6.100 5482 | 6.620 0733 | 6.849 9277 | 6.999 4420 | 7.110 4564 | 7.198 7923 | 34 |
| 27 | 6.116 9386 | 6.625 0941 | 6.852 8922 | 7.001 5451 | 7.112 0860 | 7.200 1224 | 33 |
| 28 | 6.132 7329 | 6.630 0575 | 6.855 8365 | 7.003 6381 | 7.113 7095 | 7.201 4485 | 32 |
| 29 | 6.147 9729 | 6.634 9649 | 6.858 7611 | 7.005 7211 | 7.115 3270 | 7.202 7706 | 31 |
| 30 | 6.162 6961 | 6.639 8174 | 6.861 6661 | 7.007 7941 | 7.116 9385 | 7.204 0886 | 30 |
| 31 | 6.176 9366 | 6.644 6162 | 6.864 5518 | 7.009 8572 | 7.118 5440 | 7.205 4027 | 29 |
| 32 | 6.190 7248 | 6.649 3627 | 6.867 4184 | 7.011 9107 | 7.120 1436 | 7.206 7128 | 28 |
| 33 | 6.204 0888 | 6.654 0578 | 6.870 2663 | 7.013 9544 | 7.121 7374 | 7.208 0189 | 27 |
| 34 | 6.217 0538 | 6.658 7027 | 6.873 0955 | 7.015 9886 | 7.123 3253 | 7.209 3211 | 26 |
| 35 | 6.229 6429 | 6.663 2985 | 6.875 9065 | 7.018 0132 | 7.124 9074 | 7.210 6195 | 25 |
| 36 | 6.241 8774 | 6.667 8461 | 6.878 6994 | 7.020 0285 | 7.126 4838 | 7.211 9140 | 24 |
| 37 | 6.253 7766 | 6.672 3466 | 6.881 4745 | 7.022 0345 | 7.128 0545 | 7.213 2046 | 23 |
| 38 | 6.265 3585 | 6.676 8009 | 6.884 2319 | 7.024 0313 | 7.129 6195 | 7.214 4914 | 22 |
| 39 | 6.276 6395 | 6.681 2100 | 6.886 9719 | 7.026 0189 | 7.131 1789 | 7.215 7744 | 21 |
| 40 | 6.287 6349 | 6.685 5748 | 6.889 6948 | 7.027 9975 | 7.132 7328 | 7.217 0536 | 20 |
| 41 | 6.298 3587 | 6.689 8962 | 6.892 4007 | 7.029 9671 | 7.134 2811 | 7.218 3290 | 19 |
| 42 | 6.308 8242 | 6.694 1750 | 6.895 0898 | 7.031 9278 | 7.135 8238 | 7.219 6008 | 18 |
| 43 | 6.319 0433 | 6.698 4121 | 6.897 7624 | 7.033 8796 | 7.137 3612 | 7.220 8688 | 17 |
| 44 | 6.329 0275 | 6.702 6082 | 6.900 4187 | 7.035 8228 | 7.138 8931 | 7.222 1331 | 16 |
| 45 | 6.338 7874 | 6.706 7641 | 6.903 0588 | 7.037 7573 | 7.140 4196 | 7.223 3938 | 15 |
| 46 | 6.348 3327 | 6.710 8807 | 6.905 6829 | 7.039 6832 | 7.141 9408 | 7.224 6508 | 14 |
| 47 | 6.357 6727 | 6.714 9586 | 6.908 2913 | 7.041 6006 | 7.143 4566 | 7.225 9041 | 13 |
| 48 | 6.366 8161 | 6.718 9986 | 6.910 8841 | 7.043 5096 | 7.144 9672 | 7.227 1539 | 12 |
| 49 | 6.375 7710 | 6.723 0013 | 6.913 4615 | 7.045 4103 | 7.146 4726 | 7.228 4001 | 11 |
| 50 | 6.384 5449 | 6.726 9675 | 6.916 0237 | 7.047 3026 | 7.147 9727 | 7.229 6427 | 10 |
| 51 | 6.393 1451 | 6.730 8978 | 6.918 5709 | 7.049 1868 | 7.149 4677 | 7.230 8818 | 9  |
| 52 | 6.401 5782 | 6.734 7929 | 6.921 1033 | 7.051 0628 | 7.150 9576 | 7.232 1173 | 8  |
| 53 | 6.409 8507 | 6.738 6533 | 6.923 6209 | 7.052 9307 | 7.152 4423 | 7.233 3494 | 7  |
| 54 | 6.417 9686 | 6.742 4797 | 6.926 1241 | 7.054 7906 | 7.153 9221 | 7.234 5779 | 6  |
| 55 | 6.425 9376 | 6.746 2727 | 6.928 6129 | 7.056 6426 | 7.155 3967 | 7.235 8030 | 5  |
| 56 | 6.433 7619 | 6.750 0328 | 6.931 0875 | 7.058 4868 | 7.156 8664 | 7.237 0246 | 4  |
| 57 | 6.441 4497 | 6.753 7607 | 6.933 5481 | 7.060 3231 | 7.158 3312 | 7.238 2429 | 3  |
| 58 | 6.449 0029 | 6.757 4569 | 6.935 9948 | 7.062 1517 | 7.159 7910 | 7.239 4577 | 2  |
| 59 | 6.456 4269 | 6.761 1218 | 6.938 4278 | 7.063 9727 | 7.161 2459 | 7.240 6691 | 1  |
| 60 | 6.463 7261 | 6.764 7561 | 6.940 8473 | 7.065 7860 | 7.162 6960 | 7.241 8771 | 0  |
|    |            | 58'        | 57'        | 56'        | 55'        | 54'        | "  |



| "  | 0'         | 1'         | 2'         | 3'         | 4'         | 5'         | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  |            | 6.663 7261 | 6.764 7562 | 6.940 8475 | 7.065 7863 | 7.162 6964 | 60 |
| 1  | 4.685 5749 | 6.470 9047 | 6.768 3603 | 6.943 2536 | 7.067 5921 | 7.164 1417 | 59 |
| 2  | 4.986 6049 | 6.477 9666 | 6.771 9347 | 6.945 6164 | 7.069 3904 | 7.165 5821 | 58 |
| 3  | 5.162 6961 | 6.484 9154 | 6.775 4800 | 6.948 0261 | 7.071 1813 | 7.167 0178 | 57 |
| 4  | 5.287 6349 | 6.491 7549 | 6.778 9966 | 6.950 3928 | 7.072 9649 | 7.168 4488 | 56 |
| 5  | 5.384 5449 | 6.498 4882 | 6.782 4849 | 6.952 7467 | 7.074 7412 | 7.169 8750 | 55 |
| 6  | 5.463 7261 | 6.505 1188 | 6.785 9455 | 6.955 0879 | 7.076 5102 | 7.171 2966 | 54 |
| 7  | 5.530 6729 | 6.511 6497 | 6.789 3786 | 6.957 4166 | 7.078 2720 | 7.172 7136 | 53 |
| 8  | 5.588 6649 | 6.518 0818 | 6.792 7849 | 6.959 7328 | 7.080 0268 | 7.174 1259 | 52 |
| 9  | 5.639 8174 | 6.524 4240 | 6.796 1646 | 6.962 0368 | 7.081 7744 | 7.175 5337 | 51 |
| 10 | 5.685 5749 | 6.530 6729 | 6.799 5183 | 6.964 3286 | 7.083 5151 | 7.176 9369 | 50 |
| 11 | 5.726 9676 | 6.536 8332 | 6.802 8462 | 6.966 6081 | 7.085 2488 | 7.178 3356 | 49 |
| 12 | 5.764 7561 | 6.542 9074 | 6.806 1486 | 6.968 8762 | 7.086 9756 | 7.179 7298 | 48 |
| 13 | 5.799 5182 | 6.548 8977 | 6.809 4266 | 6.971 1323 | 7.088 6956 | 7.181 1195 | 47 |
| 14 | 5.831 2029 | 6.554 8066 | 6.812 6797 | 6.973 3767 | 7.090 4088 | 7.182 5049 | 46 |
| 15 | 5.861 6661 | 6.560 6361 | 6.815 9087 | 6.975 6096 | 7.092 1153 | 7.183 8858 | 45 |
| 16 | 5.889 6949 | 6.566 3885 | 6.819 1138 | 6.977 8311 | 7.093 8151 | 7.185 2623 | 44 |
| 17 | 5.916 0238 | 6.572 0656 | 6.822 2955 | 6.980 0412 | 7.095 5082 | 7.186 6345 | 43 |
| 18 | 5.940 8474 | 6.577 6895 | 6.825 4540 | 6.982 2402 | 7.097 1948 | 7.188 0023 | 42 |
| 19 | 5.964 3285 | 6.583 2020 | 6.828 5897 | 6.984 4281 | 7.098 8749 | 7.189 3659 | 41 |
| 20 | 5.986 6049 | 6.588 6049 | 6.831 7030 | 6.986 6050 | 7.100 5484 | 7.190 7252 | 40 |
| 21 | 6.007 7942 | 6.594 0599 | 6.834 7940 | 6.988 7711 | 7.102 2156 | 7.192 0802 | 39 |
| 22 | 6.027 9975 | 6.599 3887 | 6.837 8633 | 6.990 9264 | 7.103 8764 | 7.193 4311 | 38 |
| 23 | 6.047 3047 | 6.604 6530 | 6.840 9110 | 6.993 0710 | 7.105 5309 | 7.194 7777 | 37 |
| 24 | 6.065 7861 | 6.609 8542 | 6.843 9374 | 6.995 2052 | 7.107 1790 | 7.196 1202 | 36 |
| 25 | 6.083 5149 | 6.614 9918 | 6.846 9429 | 6.997 3286 | 7.108 8210 | 7.197 4586 | 35 |
| 26 | 6.100 5482 | 6.620 0733 | 6.849 9278 | 6.999 4422 | 7.110 4567 | 7.198 7928 | 34 |
| 27 | 6.116 9186 | 6.625 0941 | 6.852 8923 | 7.001 5454 | 7.112 0864 | 7.200 1240 | 33 |
| 28 | 6.132 7129 | 6.630 0569 | 6.855 8367 | 7.003 6383 | 7.113 7099 | 7.201 4491 | 32 |
| 29 | 6.147 9729 | 6.634 9649 | 6.858 7612 | 7.005 7213 | 7.115 3274 | 7.202 7711 | 31 |
| 30 | 6.162 6061 | 6.639 8174 | 6.861 6662 | 7.007 7943 | 7.116 9389 | 7.204 0892 | 30 |
| 31 | 6.176 6166 | 6.644 6163 | 6.864 5519 | 7.009 8575 | 7.118 5444 | 7.205 4032 | 29 |
| 32 | 6.190 2148 | 6.649 3627 | 6.867 4185 | 7.011 9109 | 7.120 1440 | 7.206 7133 | 28 |
| 33 | 6.203 6888 | 6.654 0578 | 6.870 2664 | 7.013 9546 | 7.121 7378 | 7.208 0195 | 27 |
| 34 | 6.217 0549 | 6.658 7028 | 6.873 0957 | 7.015 9888 | 7.123 3257 | 7.209 3217 | 26 |
| 35 | 6.229 6429 | 6.663 2985 | 6.875 9066 | 7.018 0135 | 7.124 9078 | 7.210 6201 | 25 |
| 36 | 6.241 8774 | 6.667 8461 | 6.878 6995 | 7.020 0288 | 7.126 4842 | 7.211 9145 | 24 |
| 37 | 6.253 7766 | 6.672 3466 | 6.881 4746 | 7.022 0348 | 7.128 0549 | 7.213 2052 | 23 |
| 38 | 6.265 3585 | 6.676 8010 | 6.884 2320 | 7.024 0315 | 7.129 6199 | 7.214 4920 | 22 |
| 39 | 6.276 6195 | 6.681 2101 | 6.886 9721 | 7.026 0191 | 7.131 1791 | 7.215 7750 | 21 |
| 40 | 6.287 6419 | 6.685 5749 | 6.889 6949 | 7.027 9977 | 7.132 7332 | 7.217 0543 | 20 |
| 41 | 6.298 3587 | 6.689 8963 | 6.892 4008 | 7.029 9673 | 7.134 2815 | 7.218 3296 | 19 |
| 42 | 6.308 8442 | 6.694 1751 | 6.895 0900 | 7.031 9280 | 7.135 8242 | 7.219 6014 | 18 |
| 43 | 6.319 0933 | 6.698 4121 | 6.897 7626 | 7.033 8799 | 7.137 3616 | 7.220 8694 | 17 |
| 44 | 6.329 0275 | 6.702 6082 | 6.900 4188 | 7.035 8211 | 7.138 8935 | 7.222 1337 | 16 |
| 45 | 6.338 7874 | 6.706 7642 | 6.903 0589 | 7.037 7576 | 7.140 4200 | 7.223 3941 | 15 |
| 46 | 6.348 3127 | 6.710 8808 | 6.905 6830 | 7.039 6835 | 7.141 9412 | 7.224 6514 | 14 |
| 47 | 6.357 6227 | 6.714 9587 | 6.908 2914 | 7.041 6009 | 7.143 4570 | 7.225 9048 | 13 |
| 48 | 6.366 8161 | 6.718 9987 | 6.910 8842 | 7.043 5099 | 7.144 9676 | 7.227 1545 | 12 |
| 49 | 6.375 7710 | 6.723 0014 | 6.913 4617 | 7.045 4105 | 7.146 4730 | 7.228 4007 | 11 |
| 50 | 6.384 5449 | 6.726 9676 | 6.916 0249 | 7.047 3029 | 7.147 9732 | 7.229 6431 | 10 |
| 51 | 6.393 1451 | 6.730 8979 | 6.918 5711 | 7.049 1870 | 7.149 4681 | 7.230 8824 | 9  |
| 52 | 6.401 5782 | 6.734 7922 | 6.921 1014 | 7.051 0630 | 7.150 9580 | 7.232 1180 | 8  |
| 53 | 6.409 8507 | 6.738 6534 | 6.923 6211 | 7.052 9310 | 7.152 4428 | 7.233 3500 | 7  |
| 54 | 6.417 9686 | 6.742 4798 | 6.926 1242 | 7.054 7909 | 7.153 9225 | 7.234 5786 | 6  |
| 55 | 6.425 9376 | 6.746 2728 | 6.928 6130 | 7.056 6429 | 7.155 3972 | 7.235 8036 | 5  |
| 56 | 6.433 7629 | 6.750 0329 | 6.931 0876 | 7.058 4871 | 7.156 8669 | 7.237 0253 | 4  |
| 57 | 6.441 4497 | 6.753 7608 | 6.933 5482 | 7.060 3234 | 7.158 3316 | 7.238 2435 | 3  |
| 58 | 6.449 0029 | 6.757 4569 | 6.935 9950 | 7.062 1520 | 7.159 7914 | 7.239 4583 | 2  |
| 59 | 6.456 4269 | 6.761 1219 | 6.938 4280 | 7.063 9730 | 7.161 2464 | 7.240 6698 | 1  |
| 60 | 6.463 7261 | 6.764 7562 | 6.940 8475 | 7.065 7863 | 7.162 6964 | 7.241 8778 | 0  |
| "  | 60'        | 68'        | 67'        | 66'        | 65'        | 64'        | "  |



| "  | 6'         | 7'         | 8'         | 9'         | 10'        | 11'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 7.241 8771 | 7.308 8239 | 7.366 8157 | 7.417 8081 | 7.461 7999 | 7.500 1181 | 60 |
| 1  | 7.243 0818 | 7.309 8567 | 7.367 7198 | 7.418 7116 | 7.462 7032 | 7.501 7256 | 59 |
| 2  | 7.244 2832 | 7.310 8870 | 7.368 6215 | 7.419 6117 | 7.463 6037 | 7.502 4311 | 58 |
| 3  | 7.245 4813 | 7.311 9149 | 7.369 5216 | 7.421 5112 | 7.464 5016 | 7.503 1376 | 57 |
| 4  | 7.246 6760 | 7.312 9404 | 7.370 4198 | 7.422 4111 | 7.465 4014 | 7.504 7432 | 56 |
| 5  | 7.247 8675 | 7.313 9635 | 7.371 3162 | 7.423 3109 | 7.466 3015 | 7.505 1988 | 55 |
| 6  | 7.249 0557 | 7.314 9845 | 7.372 2107 | 7.424 2107 | 7.467 2016 | 7.506 0491 | 54 |
| 7  | 7.250 2407 | 7.316 0033 | 7.373 1034 | 7.425 1062 | 7.468 1029 | 7.507 6999 | 53 |
| 8  | 7.251 4225 | 7.317 0181 | 7.374 9943 | 7.426 1029 | 7.469 0976 | 7.508 1906 | 52 |
| 9  | 7.252 6010 | 7.318 0318 | 7.375 8833 | 7.427 0967 | 7.470 0925 | 7.509 1814 | 51 |
| 10 | 7.253 7764 | 7.319 0430 | 7.376 7705 | 7.428 0870 | 7.471 0844 | 7.510 1729 | 50 |
| 11 | 7.254 9485 | 7.320 0518 | 7.377 6559 | 7.429 0799 | 7.472 0744 | 7.511 1656 | 49 |
| 12 | 7.256 1176 | 7.321 0581 | 7.378 5396 | 7.430 0734 | 7.473 0675 | 7.512 1584 | 48 |
| 13 | 7.257 2835 | 7.322 0624 | 7.379 4214 | 7.431 0685 | 7.474 0626 | 7.513 1514 | 47 |
| 14 | 7.258 4462 | 7.323 0641 | 7.380 3013 | 7.432 0641 | 7.475 0586 | 7.514 1446 | 46 |
| 15 | 7.259 6059 | 7.324 0638 | 7.381 1796 | 7.433 0619 | 7.476 0554 | 7.515 1379 | 45 |
| 16 | 7.260 7625 | 7.325 0610 | 7.382 0561 | 7.434 0600 | 7.477 0527 | 7.516 1314 | 44 |
| 17 | 7.261 9160 | 7.326 0560 | 7.382 9308 | 7.435 0593 | 7.478 0504 | 7.517 1251 | 43 |
| 18 | 7.263 0664 | 7.327 0487 | 7.383 8038 | 7.436 0586 | 7.479 0485 | 7.518 1189 | 42 |
| 19 | 7.264 2138 | 7.328 0391 | 7.384 6750 | 7.437 0580 | 7.480 0469 | 7.519 1129 | 41 |
| 20 | 7.265 3582 | 7.329 0272 | 7.385 5443 | 7.438 0574 | 7.481 0454 | 7.520 1070 | 40 |
| 21 | 7.266 4996 | 7.330 0131 | 7.386 4113 | 7.439 0568 | 7.482 0440 | 7.521 1013 | 39 |
| 22 | 7.267 6380 | 7.330 9968 | 7.387 2761 | 7.440 0562 | 7.483 0426 | 7.522 0957 | 38 |
| 23 | 7.268 7734 | 7.331 9783 | 7.388 1384 | 7.441 0556 | 7.484 0412 | 7.523 0903 | 37 |
| 24 | 7.269 9058 | 7.332 9575 | 7.388 9989 | 7.442 0550 | 7.485 0398 | 7.524 0850 | 36 |
| 25 | 7.271 0353 | 7.333 9345 | 7.389 8568 | 7.443 0544 | 7.486 0384 | 7.525 0798 | 35 |
| 26 | 7.272 1619 | 7.334 9094 | 7.390 7120 | 7.444 0538 | 7.487 0370 | 7.526 0746 | 34 |
| 27 | 7.273 2856 | 7.335 8821 | 7.391 5654 | 7.445 0532 | 7.488 0356 | 7.527 0694 | 33 |
| 28 | 7.274 4063 | 7.336 8525 | 7.392 4181 | 7.446 0526 | 7.489 0342 | 7.528 0643 | 32 |
| 29 | 7.275 5242 | 7.337 8209 | 7.393 2693 | 7.447 0520 | 7.490 0328 | 7.529 0591 | 31 |
| 30 | 7.276 6391 | 7.338 7870 | 7.394 1190 | 7.448 0514 | 7.491 0314 | 7.530 0541 | 30 |
| 31 | 7.277 7514 | 7.339 7511 | 7.394 9681 | 7.449 0508 | 7.492 0300 | 7.531 0491 | 29 |
| 32 | 7.278 8607 | 7.340 7130 | 7.395 8164 | 7.450 0502 | 7.493 0286 | 7.532 0441 | 28 |
| 33 | 7.279 9672 | 7.341 6727 | 7.396 6640 | 7.451 0496 | 7.494 0272 | 7.533 0391 | 27 |
| 34 | 7.281 0708 | 7.342 6304 | 7.397 5109 | 7.452 0490 | 7.495 0258 | 7.534 0341 | 26 |
| 35 | 7.282 1717 | 7.343 5859 | 7.398 3570 | 7.453 0484 | 7.496 0244 | 7.535 0291 | 25 |
| 36 | 7.283 2698 | 7.344 5394 | 7.399 3021 | 7.454 0478 | 7.497 0230 | 7.536 0241 | 24 |
| 37 | 7.284 3651 | 7.345 4907 | 7.399 2463 | 7.455 0472 | 7.498 0216 | 7.537 0191 | 23 |
| 38 | 7.285 4577 | 7.346 4400 | 7.399 1895 | 7.456 0466 | 7.499 0202 | 7.538 0141 | 22 |
| 39 | 7.286 5475 | 7.347 3872 | 7.400 1318 | 7.457 0460 | 7.500 0188 | 7.539 0091 | 21 |
| 40 | 7.287 6346 | 7.348 3323 | 7.401 0730 | 7.458 0454 | 7.501 0174 | 7.540 0041 | 20 |
| 41 | 7.288 7190 | 7.349 2754 | 7.402 0131 | 7.459 0448 | 7.502 0160 | 7.541 0011 | 19 |
| 42 | 7.289 8006 | 7.350 2165 | 7.403 0521 | 7.460 0442 | 7.503 0146 | 7.542 0001 | 18 |
| 43 | 7.290 8796 | 7.351 1555 | 7.404 0899 | 7.461 0436 | 7.504 0132 | 7.543 0001 | 17 |
| 44 | 7.291 9560 | 7.352 0925 | 7.405 0267 | 7.462 0430 | 7.505 0118 | 7.544 0001 | 16 |
| 45 | 7.293 0306 | 7.353 0275 | 7.406 0625 | 7.463 0424 | 7.506 0104 | 7.545 0001 | 15 |
| 46 | 7.294 1006 | 7.353 9604 | 7.407 0973 | 7.464 0418 | 7.507 0090 | 7.546 0001 | 14 |
| 47 | 7.295 1660 | 7.354 8914 | 7.408 1310 | 7.465 0412 | 7.508 0076 | 7.547 0001 | 13 |
| 48 | 7.296 2277 | 7.355 8203 | 7.409 1637 | 7.466 0406 | 7.509 0062 | 7.548 0001 | 12 |
| 49 | 7.297 2859 | 7.356 7473 | 7.410 1954 | 7.467 0400 | 7.510 0048 | 7.549 0001 | 11 |
| 50 | 7.298 3384 | 7.357 6723 | 7.411 2261 | 7.468 0394 | 7.511 0034 | 7.550 0001 | 10 |
| 51 | 7.299 4164 | 7.358 5954 | 7.412 2558 | 7.469 0388 | 7.512 0020 | 7.551 0001 | 9  |
| 52 | 7.300 4718 | 7.359 5165 | 7.413 2845 | 7.470 0382 | 7.513 0006 | 7.552 0001 | 8  |
| 53 | 7.301 5246 | 7.360 4356 | 7.414 3122 | 7.471 0376 | 7.514 0001 | 7.553 0001 | 7  |
| 54 | 7.302 5749 | 7.361 3528 | 7.415 3389 | 7.472 0370 | 7.515 0001 | 7.554 0001 | 6  |
| 55 | 7.303 6227 | 7.362 2681 | 7.416 3646 | 7.473 0364 | 7.516 0001 | 7.555 0001 | 5  |
| 56 | 7.304 6679 | 7.363 1814 | 7.417 3892 | 7.474 0358 | 7.517 0001 | 7.556 0001 | 4  |
| 57 | 7.305 7106 | 7.364 0929 | 7.418 4127 | 7.475 0352 | 7.518 0001 | 7.557 0001 | 3  |
| 58 | 7.306 7509 | 7.365 0024 | 7.419 4352 | 7.476 0346 | 7.519 0001 | 7.558 0001 | 2  |
| 59 | 7.307 7886 | 7.365 9100 | 7.420 4567 | 7.477 0340 | 7.520 0001 | 7.559 0001 | 1  |
| 60 | 7.308 8239 | 7.366 8157 | 7.421 4761 | 7.478 0334 | 7.521 0001 | 7.560 0001 | 0  |
| "  | 61'        | 62'        | 61'        | 60'        | 49'        | 48'        | "  |



| "  | 6'         | 7'         | 8'         | 9'         | 10'        | 11'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 7.241 8778 | 7.308 8248 | 7.366 8169 | 7.417 9696 | 7.463 7273 | 7.505 1203 | 60 |
| 1  | 7.243 0825 | 7.309 8576 | 7.367 7207 | 7.418 7731 | 7.464 4506 | 7.505 7778 | 59 |
| 2  | 7.244 2839 | 7.310 8879 | 7.368 6227 | 7.419 5752 | 7.465 1726 | 7.506 4343 | 58 |
| 3  | 7.245 4819 | 7.311 9158 | 7.369 5228 | 7.420 3757 | 7.465 8934 | 7.507 0899 | 57 |
| 4  | 7.246 6767 | 7.312 9413 | 7.370 4210 | 7.421 1748 | 7.466 6130 | 7.507 7444 | 56 |
| 5  | 7.247 8682 | 7.313 9644 | 7.371 3174 | 7.421 9724 | 7.467 3315 | 7.508 3980 | 55 |
| 6  | 7.249 0564 | 7.314 9851 | 7.372 2119 | 7.422 7685 | 7.468 0487 | 7.509 0506 | 54 |
| 7  | 7.250 2414 | 7.316 0034 | 7.373 1046 | 7.423 5632 | 7.468 7648 | 7.509 7022 | 53 |
| 8  | 7.251 4231 | 7.317 0193 | 7.373 9955 | 7.424 3504 | 7.469 4797 | 7.510 3528 | 52 |
| 9  | 7.252 6017 | 7.318 0328 | 7.374 8845 | 7.425 1482 | 7.470 1934 | 7.511 0025 | 51 |
| 10 | 7.253 7771 | 7.319 0440 | 7.375 7718 | 7.425 9386 | 7.470 9060 | 7.511 6512 | 50 |
| 11 | 7.254 9492 | 7.320 0528 | 7.376 6572 | 7.426 7275 | 7.471 6173 | 7.512 2989 | 49 |
| 12 | 7.256 1183 | 7.321 0592 | 7.377 5408 | 7.427 5150 | 7.472 3276 | 7.512 9457 | 48 |
| 13 | 7.257 2842 | 7.322 0634 | 7.378 4226 | 7.428 3010 | 7.473 0366 | 7.513 5915 | 47 |
| 14 | 7.258 4469 | 7.323 0652 | 7.379 3026 | 7.429 0857 | 7.473 7445 | 7.514 2363 | 46 |
| 15 | 7.259 6066 | 7.324 0648 | 7.380 1809 | 7.429 8689 | 7.474 4513 | 7.514 8802 | 45 |
| 16 | 7.260 7632 | 7.325 0620 | 7.381 0574 | 7.430 6507 | 7.475 1569 | 7.515 5231 | 44 |
| 17 | 7.261 9167 | 7.326 0570 | 7.381 9321 | 7.431 4311 | 7.475 8613 | 7.516 1651 | 43 |
| 18 | 7.263 0672 | 7.327 0496 | 7.382 8051 | 7.432 2101 | 7.476 5646 | 7.516 8061 | 42 |
| 19 | 7.264 2146 | 7.328 0400 | 7.383 6763 | 7.432 9877 | 7.477 2668 | 7.517 4462 | 41 |
| 20 | 7.265 3590 | 7.329 0282 | 7.384 5457 | 7.433 7640 | 7.477 9679 | 7.518 0854 | 40 |
| 21 | 7.266 5003 | 7.330 0141 | 7.385 4134 | 7.434 5388 | 7.478 6678 | 7.518 7236 | 39 |
| 22 | 7.267 6387 | 7.330 9978 | 7.386 2794 | 7.435 3123 | 7.479 3666 | 7.519 3608 | 38 |
| 23 | 7.268 7741 | 7.331 9793 | 7.387 1437 | 7.436 0843 | 7.480 0642 | 7.519 9972 | 37 |
| 24 | 7.269 9066 | 7.332 9585 | 7.388 0063 | 7.436 8551 | 7.480 7608 | 7.520 6326 | 36 |
| 25 | 7.271 0361 | 7.333 9356 | 7.388 8671 | 7.437 6244 | 7.481 4562 | 7.521 2670 | 35 |
| 26 | 7.272 1627 | 7.334 9104 | 7.389 7263 | 7.438 3924 | 7.482 1505 | 7.521 9006 | 34 |
| 27 | 7.273 2863 | 7.335 8831 | 7.390 5837 | 7.439 1590 | 7.482 8437 | 7.522 5332 | 33 |
| 28 | 7.274 4071 | 7.336 8536 | 7.391 4395 | 7.439 9243 | 7.483 5359 | 7.523 1649 | 32 |
| 29 | 7.275 5250 | 7.337 8219 | 7.392 2935 | 7.440 6882 | 7.484 2269 | 7.523 7957 | 31 |
| 30 | 7.276 6400 | 7.338 7881 | 7.393 1459 | 7.441 4508 | 7.484 9168 | 7.524 4256 | 30 |
| 31 | 7.277 7521 | 7.339 7521 | 7.393 9967 | 7.442 2121 | 7.485 6056 | 7.525 0545 | 29 |
| 32 | 7.278 8615 | 7.340 7140 | 7.394 8457 | 7.442 9720 | 7.486 2933 | 7.525 6826 | 28 |
| 33 | 7.279 9679 | 7.341 6738 | 7.395 6931 | 7.443 7306 | 7.486 9799 | 7.526 3097 | 27 |
| 34 | 7.281 0716 | 7.342 6314 | 7.396 5389 | 7.444 4879 | 7.487 6655 | 7.526 9360 | 26 |
| 35 | 7.282 1725 | 7.343 5870 | 7.397 3830 | 7.445 2438 | 7.488 3500 | 7.527 5613 | 25 |
| 36 | 7.283 2706 | 7.344 5404 | 7.398 2255 | 7.445 9985 | 7.489 0334 | 7.528 1858 | 24 |
| 37 | 7.284 3659 | 7.345 4918 | 7.399 0663 | 7.446 7518 | 7.489 7157 | 7.528 8093 | 23 |
| 38 | 7.285 4585 | 7.346 4411 | 7.399 9055 | 7.447 5038 | 7.490 3969 | 7.529 4319 | 22 |
| 39 | 7.286 5483 | 7.347 3883 | 7.400 7431 | 7.448 2546 | 7.491 0771 | 7.530 0537 | 21 |
| 40 | 7.287 6354 | 7.348 3334 | 7.401 5791 | 7.449 0040 | 7.491 7562 | 7.530 6746 | 20 |
| 41 | 7.288 7198 | 7.349 2765 | 7.402 4135 | 7.449 7521 | 7.492 4343 | 7.531 2946 | 19 |
| 42 | 7.289 8015 | 7.350 2176 | 7.403 2403 | 7.450 4990 | 7.493 1113 | 7.531 9137 | 18 |
| 43 | 7.290 8805 | 7.351 1566 | 7.404 0775 | 7.451 2446 | 7.493 7872 | 7.532 5319 | 17 |
| 44 | 7.291 9568 | 7.352 0936 | 7.404 9071 | 7.451 9889 | 7.494 4621 | 7.533 1492 | 16 |
| 45 | 7.293 0304 | 7.353 0286 | 7.405 7351 | 7.452 7319 | 7.495 1360 | 7.533 7657 | 15 |
| 46 | 7.294 1015 | 7.353 9615 | 7.406 5616 | 7.453 4737 | 7.495 8088 | 7.534 3813 | 14 |
| 47 | 7.295 1698 | 7.354 8925 | 7.407 3864 | 7.454 2141 | 7.496 4806 | 7.534 9960 | 13 |
| 48 | 7.296 2356 | 7.355 8215 | 7.408 2097 | 7.454 9534 | 7.497 1513 | 7.535 6098 | 12 |
| 49 | 7.297 2987 | 7.356 7485 | 7.409 0315 | 7.455 6913 | 7.497 8210 | 7.536 2228 | 11 |
| 50 | 7.298 3593 | 7.357 6735 | 7.409 8517 | 7.456 4281 | 7.498 4897 | 7.536 8349 | 10 |
| 51 | 7.299 4173 | 7.358 5965 | 7.410 6703 | 7.457 1635 | 7.499 1573 | 7.537 4462 | 9  |
| 52 | 7.300 4727 | 7.359 5176 | 7.411 4875 | 7.457 8978 | 7.499 8239 | 7.538 0566 | 8  |
| 53 | 7.301 5255 | 7.360 4368 | 7.412 3030 | 7.458 6308 | 7.500 4895 | 7.538 6661 | 7  |
| 54 | 7.302 5758 | 7.361 3540 | 7.413 1171 | 7.459 3625 | 7.501 1541 | 7.539 2748 | 6  |
| 55 | 7.303 6225 | 7.362 2692 | 7.413 9296 | 7.460 0930 | 7.501 8176 | 7.539 8826 | 5  |
| 56 | 7.304 6688 | 7.363 1826 | 7.414 7406 | 7.460 8223 | 7.502 4802 | 7.540 4896 | 4  |
| 57 | 7.305 7115 | 7.364 0940 | 7.415 5501 | 7.461 5504 | 7.503 1417 | 7.541 0958 | 3  |
| 58 | 7.306 7517 | 7.365 0035 | 7.416 3581 | 7.462 2773 | 7.503 8022 | 7.541 7011 | 2  |
| 59 | 7.307 7895 | 7.365 9112 | 7.417 1646 | 7.463 0029 | 7.504 4618 | 7.542 3055 | 1  |
| 60 | 7.308 8248 | 7.366 8169 | 7.417 9696 | 7.463 7273 | 7.505 1203 | 7.542 9091 | 0  |
| "  | 58'        | 52'        | 51'        | 50'        | 49'        | 48'        | "  |



| "  | 12'        | 13'        | 14'        | 15'        | 16'        | 17'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 7.544 9065 | 7.577 6684 | 7.609 8530 | 7.649 8160 | 7.672 8148 | 7.694 1711 | 60 |
| 1  | 7.543 5092 | 7.578 2249 | 7.610 3697 | 7.649 2984 | 7.668 2452 | 7.694 5208 | 59 |
| 2  | 7.544 1112 | 7.578 7806 | 7.610 8858 | 7.649 7580 | 7.668 7404 | 7.694 5445 | 58 |
| 3  | 7.544 7123 | 7.579 3356 | 7.611 4012 | 7.649 2940 | 7.669 2916 | 7.694 5481 | 57 |
| 4  | 7.545 3125 | 7.579 8899 | 7.611 9164 | 7.649 7419 | 7.669 6903 | 7.694 5250 | 56 |
| 5  | 7.545 9120 | 7.580 4435 | 7.612 4313 | 7.649 2412 | 7.669 2406 | 7.694 5297 | 55 |
| 6  | 7.546 5106 | 7.580 9964 | 7.612 9440 | 7.649 7412 | 7.669 7404 | 7.694 5302 | 54 |
| 7  | 7.547 1084 | 7.581 5485 | 7.613 4571 | 7.649 2403 | 7.669 2403 | 7.694 5345 | 53 |
| 8  | 7.547 7053 | 7.582 1000 | 7.613 9693 | 7.649 7393 | 7.669 7393 | 7.694 5362 | 52 |
| 9  | 7.548 3015 | 7.582 6508 | 7.614 4813 | 7.649 2384 | 7.669 2384 | 7.694 5393 | 51 |
| 10 | 7.548 8968 | 7.583 2009 | 7.614 9926 | 7.649 7372 | 7.669 7372 | 7.694 5404 | 50 |
| 11 | 7.549 4913 | 7.583 7501 | 7.615 5042 | 7.649 2361 | 7.669 2361 | 7.694 5417 | 49 |
| 12 | 7.550 0850 | 7.584 2993 | 7.616 0142 | 7.649 7350 | 7.669 7350 | 7.694 5428 | 48 |
| 13 | 7.550 6779 | 7.584 8470 | 7.616 5242 | 7.649 2340 | 7.669 2340 | 7.694 5434 | 47 |
| 14 | 7.551 2700 | 7.585 3943 | 7.617 0343 | 7.649 7329 | 7.669 7329 | 7.694 5446 | 46 |
| 15 | 7.551 8611 | 7.585 9409 | 7.617 5447 | 7.649 2318 | 7.669 2318 | 7.694 5453 | 45 |
| 16 | 7.552 4518 | 7.586 4869 | 7.618 0543 | 7.649 7307 | 7.669 7307 | 7.694 5460 | 44 |
| 17 | 7.553 0414 | 7.587 0323 | 7.618 5644 | 7.649 2296 | 7.669 2296 | 7.694 5468 | 43 |
| 18 | 7.553 6303 | 7.587 5767 | 7.619 0742 | 7.649 7285 | 7.669 7285 | 7.694 5474 | 42 |
| 19 | 7.554 2184 | 7.588 1206 | 7.619 5840 | 7.649 2274 | 7.669 2274 | 7.694 5480 | 41 |
| 20 | 7.554 8057 | 7.588 6648 | 7.620 0931 | 7.649 7263 | 7.669 7263 | 7.694 5487 | 40 |
| 21 | 7.555 3921 | 7.589 2084 | 7.620 6028 | 7.649 2252 | 7.669 2252 | 7.694 5493 | 39 |
| 22 | 7.555 9778 | 7.589 7511 | 7.621 1129 | 7.649 7241 | 7.669 7241 | 7.694 5500 | 38 |
| 23 | 7.556 5627 | 7.590 2931 | 7.621 6224 | 7.649 2230 | 7.669 2230 | 7.694 5506 | 37 |
| 24 | 7.557 1469 | 7.590 8348 | 7.622 1321 | 7.649 7219 | 7.669 7219 | 7.694 5513 | 36 |
| 25 | 7.557 7302 | 7.591 3766 | 7.622 6412 | 7.649 7208 | 7.669 7208 | 7.694 5519 | 35 |
| 26 | 7.558 3127 | 7.591 9188 | 7.623 1503 | 7.649 2197 | 7.669 2197 | 7.694 5526 | 34 |
| 27 | 7.558 8945 | 7.592 4603 | 7.623 6597 | 7.649 7186 | 7.669 7186 | 7.694 5532 | 33 |
| 28 | 7.559 4755 | 7.592 9931 | 7.624 1683 | 7.649 7175 | 7.669 7175 | 7.694 5539 | 32 |
| 29 | 7.560 0557 | 7.593 5281 | 7.624 6771 | 7.649 2164 | 7.669 2164 | 7.694 5545 | 31 |
| 30 | 7.560 6352 | 7.594 0638 | 7.625 1862 | 7.649 7153 | 7.669 7153 | 7.694 5551 | 30 |
| 31 | 7.561 2138 | 7.594 5946 | 7.625 6957 | 7.649 2142 | 7.669 2142 | 7.694 5558 | 29 |
| 32 | 7.561 7917 | 7.595 1248 | 7.626 2054 | 7.649 7131 | 7.669 7131 | 7.694 5564 | 28 |
| 33 | 7.562 3689 | 7.595 6543 | 7.626 7152 | 7.649 2120 | 7.669 2120 | 7.694 5570 | 27 |
| 34 | 7.562 9452 | 7.596 1841 | 7.627 2251 | 7.649 7109 | 7.669 7109 | 7.694 5576 | 26 |
| 35 | 7.563 5208 | 7.596 7133 | 7.627 7351 | 7.649 7098 | 7.669 7098 | 7.694 5582 | 25 |
| 36 | 7.564 0957 | 7.597 2429 | 7.628 2452 | 7.649 2087 | 7.669 2087 | 7.694 5588 | 24 |
| 37 | 7.564 6698 | 7.597 7728 | 7.628 7553 | 7.649 7076 | 7.669 7076 | 7.694 5594 | 23 |
| 38 | 7.565 2431 | 7.598 3020 | 7.629 2654 | 7.649 7065 | 7.669 7065 | 7.694 5600 | 22 |
| 39 | 7.565 8157 | 7.598 8316 | 7.629 7756 | 7.649 2054 | 7.669 2054 | 7.694 5606 | 21 |
| 40 | 7.566 3875 | 7.599 3616 | 7.630 2858 | 7.649 7043 | 7.669 7043 | 7.694 5612 | 20 |
| 41 | 7.566 9585 | 7.599 8910 | 7.630 7961 | 7.649 2032 | 7.669 2032 | 7.694 5618 | 19 |
| 42 | 7.567 5289 | 7.600 4204 | 7.631 3064 | 7.649 7021 | 7.669 7021 | 7.694 5624 | 18 |
| 43 | 7.568 0984 | 7.600 9495 | 7.631 8167 | 7.649 2010 | 7.669 2010 | 7.694 5630 | 17 |
| 44 | 7.568 6672 | 7.601 4786 | 7.632 3270 | 7.649 7000 | 7.669 7000 | 7.694 5636 | 16 |
| 45 | 7.569 2353 | 7.602 0077 | 7.632 8373 | 7.649 6989 | 7.669 6989 | 7.694 5642 | 15 |
| 46 | 7.569 8026 | 7.602 5368 | 7.633 3476 | 7.649 6978 | 7.669 6978 | 7.694 5648 | 14 |
| 47 | 7.570 3692 | 7.603 0659 | 7.633 8579 | 7.649 6967 | 7.669 6967 | 7.694 5654 | 13 |
| 48 | 7.570 9351 | 7.603 5950 | 7.634 3682 | 7.649 6956 | 7.669 6956 | 7.694 5660 | 12 |
| 49 | 7.571 5002 | 7.604 1241 | 7.634 8785 | 7.649 6945 | 7.669 6945 | 7.694 5666 | 11 |
| 50 | 7.572 0646 | 7.604 6532 | 7.635 3888 | 7.649 6934 | 7.669 6934 | 7.694 5672 | 10 |
| 51 | 7.572 6282 | 7.605 1823 | 7.635 8991 | 7.649 6923 | 7.669 6923 | 7.694 5678 | 9  |
| 52 | 7.573 1912 | 7.605 6970 | 7.636 4094 | 7.649 6912 | 7.669 6912 | 7.694 5684 | 8  |
| 53 | 7.573 7531 | 7.606 2117 | 7.636 9197 | 7.649 6901 | 7.669 6901 | 7.694 5690 | 7  |
| 54 | 7.574 3148 | 7.606 7264 | 7.637 4300 | 7.649 6890 | 7.669 6890 | 7.694 5696 | 6  |
| 55 | 7.574 8755 | 7.607 2411 | 7.637 9403 | 7.649 6879 | 7.669 6879 | 7.694 5702 | 5  |
| 56 | 7.575 4356 | 7.607 7558 | 7.638 4506 | 7.649 6868 | 7.669 6868 | 7.694 5708 | 4  |
| 57 | 7.575 9949 | 7.608 2705 | 7.638 9609 | 7.649 6857 | 7.669 6857 | 7.694 5714 | 3  |
| 58 | 7.576 5534 | 7.608 7852 | 7.639 4712 | 7.649 6846 | 7.669 6846 | 7.694 5720 | 2  |
| 59 | 7.577 1113 | 7.609 2999 | 7.639 9815 | 7.649 6835 | 7.669 6835 | 7.694 5726 | 1  |
| 60 | 7.577 6684 | 7.609 8130 | 7.640 4918 | 7.649 6824 | 7.669 6824 | 7.694 5732 | 0  |
| "  | 47'        | 48'        | 49'        | 44'        | 43'        | 42'        | "  |



| "  | 19'        | 18'        | 14'        | 15'        | 16'        | 17'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 7.542 9991 | 7.577 6715 | 7.609 8566 | 7.639 8201 | 7.667 8492 | 7.694 1786 | 60 |
| 1  | 7.543 5119 | 7.578 2280 | 7.610 3733 | 7.640 3024 | 7.668 3014 | 7.694 6042 | 59 |
| 2  | 7.544 1138 | 7.578 7847 | 7.610 8894 | 7.640 7842 | 7.668 7531 | 7.695 0293 | 58 |
| 3  | 7.544 7149 | 7.579 3387 | 7.611 4049 | 7.641 2654 | 7.669 2043 | 7.695 4541 | 57 |
| 4  | 7.545 3152 | 7.579 8930 | 7.611 9197 | 7.641 7461 | 7.669 6551 | 7.695 8784 | 56 |
| 5  | 7.545 9147 | 7.580 4466 | 7.612 4340 | 7.642 2262 | 7.670 1053 | 7.696 3023 | 55 |
| 6  | 7.546 5133 | 7.580 9995 | 7.612 9477 | 7.642 7059 | 7.670 5552 | 7.696 7258 | 54 |
| 7  | 7.547 1111 | 7.581 5517 | 7.613 4617 | 7.643 1850 | 7.671 0045 | 7.697 1489 | 53 |
| 8  | 7.547 7080 | 7.582 1032 | 7.613 9732 | 7.643 6635 | 7.671 4534 | 7.697 5716 | 52 |
| 9  | 7.548 3042 | 7.582 6540 | 7.614 4850 | 7.644 1416 | 7.671 9018 | 7.697 9938 | 51 |
| 10 | 7.548 8995 | 7.583 2041 | 7.614 9963 | 7.644 6191 | 7.672 3498 | 7.698 4157 | 50 |
| 11 | 7.549 4941 | 7.583 7535 | 7.615 5069 | 7.645 0961 | 7.672 7973 | 7.698 8371 | 49 |
| 12 | 7.550 0878 | 7.584 3022 | 7.616 0169 | 7.645 5725 | 7.673 2443 | 7.699 2582 | 48 |
| 13 | 7.550 6807 | 7.584 8502 | 7.616 5264 | 7.646 0485 | 7.673 6909 | 7.699 6788 | 47 |
| 14 | 7.551 2728 | 7.585 3975 | 7.617 0352 | 7.646 5239 | 7.674 1371 | 7.700 0990 | 46 |
| 15 | 7.551 8640 | 7.585 9441 | 7.617 5435 | 7.646 9988 | 7.674 5827 | 7.700 5189 | 45 |
| 16 | 7.552 4545 | 7.586 4901 | 7.618 0511 | 7.647 4732 | 7.675 0279 | 7.700 9384 | 44 |
| 17 | 7.553 0442 | 7.587 0353 | 7.618 5582 | 7.647 9471 | 7.675 4727 | 7.701 3573 | 43 |
| 18 | 7.553 6331 | 7.587 5799 | 7.619 0647 | 7.648 4204 | 7.675 9170 | 7.701 7759 | 42 |
| 19 | 7.554 2212 | 7.588 1238 | 7.619 5705 | 7.648 8933 | 7.676 3608 | 7.702 1941 | 41 |
| 20 | 7.554 8084 | 7.588 6670 | 7.620 0758 | 7.649 3656 | 7.676 8042 | 7.702 6119 | 40 |
| 21 | 7.555 3949 | 7.589 2096 | 7.620 5805 | 7.649 8374 | 7.677 2471 | 7.703 0293 | 39 |
| 22 | 7.555 9806 | 7.589 7514 | 7.621 0847 | 7.650 3087 | 7.677 6896 | 7.703 4463 | 38 |
| 23 | 7.556 5656 | 7.590 2926 | 7.621 5882 | 7.650 7795 | 7.678 1317 | 7.703 8629 | 37 |
| 24 | 7.557 1497 | 7.590 8331 | 7.622 0911 | 7.651 2497 | 7.678 5733 | 7.704 2791 | 36 |
| 25 | 7.557 7330 | 7.591 3730 | 7.622 5935 | 7.651 7195 | 7.679 0144 | 7.704 6949 | 35 |
| 26 | 7.558 3156 | 7.591 9121 | 7.623 0953 | 7.652 1888 | 7.679 4551 | 7.705 1103 | 34 |
| 27 | 7.558 8974 | 7.592 4506 | 7.623 5965 | 7.652 6575 | 7.679 8953 | 7.705 5253 | 33 |
| 28 | 7.559 4784 | 7.592 9884 | 7.624 0972 | 7.653 1258 | 7.680 3351 | 7.705 9399 | 32 |
| 29 | 7.560 0586 | 7.593 5256 | 7.624 5972 | 7.653 5935 | 7.680 7745 | 7.706 3541 | 31 |
| 30 | 7.560 6380 | 7.594 0621 | 7.625 0967 | 7.654 0608 | 7.681 2134 | 7.706 7679 | 30 |
| 31 | 7.561 2167 | 7.594 5980 | 7.625 5956 | 7.654 5275 | 7.681 6519 | 7.707 1813 | 29 |
| 32 | 7.561 7946 | 7.595 1341 | 7.626 0939 | 7.654 9942 | 7.682 0899 | 7.707 5941 | 28 |
| 33 | 7.562 3718 | 7.595 6697 | 7.626 5917 | 7.655 4595 | 7.682 5275 | 7.708 0070 | 27 |
| 34 | 7.562 9481 | 7.596 2045 | 7.627 0889 | 7.655 9247 | 7.682 9646 | 7.708 4193 | 26 |
| 35 | 7.563 5238 | 7.596 7387 | 7.627 5855 | 7.656 3895 | 7.683 4013 | 7.708 8311 | 25 |
| 36 | 7.564 0986 | 7.597 2723 | 7.628 0816 | 7.656 8537 | 7.683 8376 | 7.709 2426 | 24 |
| 37 | 7.564 6727 | 7.597 8053 | 7.628 5771 | 7.657 3174 | 7.684 2734 | 7.709 6537 | 23 |
| 38 | 7.565 2460 | 7.598 3374 | 7.629 0720 | 7.657 7807 | 7.684 7088 | 7.710 0643 | 22 |
| 39 | 7.565 8186 | 7.598 8681 | 7.629 5664 | 7.658 2435 | 7.685 1438 | 7.710 4746 | 21 |
| 40 | 7.566 3914 | 7.599 3980 | 7.630 0602 | 7.658 7057 | 7.685 5783 | 7.710 8846 | 20 |
| 41 | 7.566 9615 | 7.599 9281 | 7.630 5534 | 7.659 1675 | 7.686 0124 | 7.711 2941 | 19 |
| 42 | 7.567 5318 | 7.600 4490 | 7.631 0461 | 7.659 6288 | 7.686 4460 | 7.711 7032 | 18 |
| 43 | 7.568 1014 | 7.600 9700 | 7.631 5382 | 7.660 0896 | 7.686 8792 | 7.712 1120 | 17 |
| 44 | 7.568 6702 | 7.601 5014 | 7.632 0298 | 7.660 5499 | 7.687 3120 | 7.712 5204 | 16 |
| 45 | 7.569 2383 | 7.602 0311 | 7.632 5208 | 7.661 0097 | 7.687 7444 | 7.712 9283 | 15 |
| 46 | 7.569 8056 | 7.602 5574 | 7.633 0113 | 7.661 4690 | 7.688 1763 | 7.713 3359 | 14 |
| 47 | 7.570 3722 | 7.603 0827 | 7.633 5012 | 7.661 9279 | 7.688 6078 | 7.713 7432 | 13 |
| 48 | 7.570 9381 | 7.603 6075 | 7.633 9905 | 7.662 3864 | 7.689 0389 | 7.714 1500 | 12 |
| 49 | 7.571 5032 | 7.604 1317 | 7.634 4793 | 7.662 8443 | 7.689 4695 | 7.714 5565 | 11 |
| 50 | 7.572 0676 | 7.604 6553 | 7.634 9676 | 7.663 3015 | 7.689 8997 | 7.714 9628 | 10 |
| 51 | 7.572 6313 | 7.605 1782 | 7.635 4553 | 7.663 7585 | 7.690 3295 | 7.715 3682 | 9  |
| 52 | 7.573 1942 | 7.605 7005 | 7.635 9424 | 7.664 2149 | 7.690 7589 | 7.715 7736 | 8  |
| 53 | 7.573 7564 | 7.606 2222 | 7.636 4291 | 7.664 6709 | 7.691 1878 | 7.716 1785 | 7  |
| 54 | 7.574 3179 | 7.606 7433 | 7.636 9151 | 7.665 1263 | 7.691 6163 | 7.716 5831 | 6  |
| 55 | 7.574 8786 | 7.607 2637 | 7.637 4006 | 7.665 5813 | 7.692 0444 | 7.716 9873 | 5  |
| 56 | 7.575 4386 | 7.607 7835 | 7.637 8856 | 7.666 0359 | 7.692 4721 | 7.717 3911 | 4  |
| 57 | 7.575 9979 | 7.608 3027 | 7.638 3700 | 7.666 4899 | 7.692 8993 | 7.717 7945 | 3  |
| 58 | 7.576 5565 | 7.608 8213 | 7.638 8539 | 7.666 9435 | 7.693 3262 | 7.718 1976 | 2  |
| 59 | 7.577 1144 | 7.609 3393 | 7.639 3373 | 7.667 3966 | 7.693 7526 | 7.718 6004 | 1  |
| 60 | 7.577 6715 | 7.609 8566 | 7.639 8201 | 7.667 8492 | 7.694 1786 | 7.719 0026 | 0  |
| "  | 47'        | 46'        | 45'        | 44'        | 43'        | 42'        | "  |



| "  | 18'        | 19'        | 20'        | 21'        | 22'        | 23'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 7.718 9966 | 7.742 4775 | 7.764 7537 | 7.785 9427 | 7.806 1458 | 7.825 4507 | 60 |
| 1  | 7.719 3986 | 7.742 8583 | 7.765 1154 | 7.786 2872 | 7.806 4747 | 7.825 7653 | 59 |
| 2  | 7.719 8001 | 7.743 2388 | 7.765 4769 | 7.786 6315 | 7.806 8033 | 7.826 0797 | 58 |
| 3  | 7.720 2013 | 7.743 6189 | 7.765 8380 | 7.786 9755 | 7.807 1317 | 7.826 3938 | 57 |
| 4  | 7.720 6021 | 7.743 9987 | 7.766 1989 | 7.787 3192 | 7.807 4599 | 7.826 7077 | 56 |
| 5  | 7.721 0026 | 7.744 3781 | 7.766 5594 | 7.787 6627 | 7.807 7878 | 7.827 0214 | 55 |
| 6  | 7.721 4027 | 7.744 7573 | 7.766 9197 | 7.788 0058 | 7.808 1154 | 7.827 3348 | 54 |
| 7  | 7.721 8024 | 7.745 1360 | 7.767 2797 | 7.788 3488 | 7.808 4428 | 7.827 6481 | 53 |
| 8  | 7.722 2017 | 7.745 5145 | 7.767 6393 | 7.788 6914 | 7.808 7699 | 7.827 9611 | 52 |
| 9  | 7.722 6007 | 7.745 8926 | 7.767 9987 | 7.789 0337 | 7.809 0966 | 7.828 2738 | 51 |
| 10 | 7.722 9993 | 7.746 2705 | 7.768 3577 | 7.789 3758 | 7.809 4235 | 7.828 5864 | 50 |
| 11 | 7.723 3976 | 7.746 6479 | 7.768 7165 | 7.789 7177 | 7.809 7499 | 7.828 8987 | 49 |
| 12 | 7.723 7955 | 7.747 0251 | 7.769 0750 | 7.790 0592 | 7.810 0761 | 7.829 2108 | 48 |
| 13 | 7.724 1930 | 7.747 4019 | 7.769 4332 | 7.790 4005 | 7.810 4020 | 7.829 5227 | 47 |
| 14 | 7.724 5902 | 7.747 7784 | 7.769 7910 | 7.790 7415 | 7.810 7277 | 7.829 8343 | 46 |
| 15 | 7.724 9869 | 7.748 1546 | 7.770 1486 | 7.791 0823 | 7.811 0531 | 7.830 1458 | 45 |
| 16 | 7.725 3834 | 7.748 5304 | 7.770 5059 | 7.791 4228 | 7.811 3783 | 7.830 4570 | 44 |
| 17 | 7.725 7794 | 7.748 9059 | 7.770 8629 | 7.791 7630 | 7.811 7032 | 7.830 7680 | 43 |
| 18 | 7.726 1752 | 7.749 2811 | 7.771 2196 | 7.792 1029 | 7.812 0279 | 7.831 0787 | 42 |
| 19 | 7.726 5705 | 7.749 6560 | 7.771 5760 | 7.792 4426 | 7.812 3524 | 7.831 3893 | 41 |
| 20 | 7.726 9655 | 7.750 0306 | 7.771 9322 | 7.792 7820 | 7.812 6766 | 7.831 6996 | 40 |
| 21 | 7.727 3601 | 7.750 4048 | 7.772 2880 | 7.793 1212 | 7.813 0006 | 7.832 0097 | 39 |
| 22 | 7.727 7544 | 7.750 7787 | 7.772 6435 | 7.793 4601 | 7.813 3243 | 7.832 3195 | 38 |
| 23 | 7.728 1483 | 7.751 1523 | 7.772 9988 | 7.793 7987 | 7.813 6478 | 7.832 6292 | 37 |
| 24 | 7.728 5419 | 7.751 5255 | 7.773 3537 | 7.794 1371 | 7.813 9711 | 7.832 9386 | 36 |
| 25 | 7.728 9351 | 7.751 8985 | 7.773 7084 | 7.794 4752 | 7.814 2941 | 7.833 2478 | 35 |
| 26 | 7.729 3279 | 7.752 2711 | 7.774 0628 | 7.794 8130 | 7.814 6168 | 7.833 5568 | 34 |
| 27 | 7.729 7204 | 7.752 6434 | 7.774 4169 | 7.795 1506 | 7.814 9394 | 7.833 8656 | 33 |
| 28 | 7.730 1125 | 7.753 0154 | 7.774 7707 | 7.795 4879 | 7.815 2617 | 7.834 1741 | 32 |
| 29 | 7.730 5043 | 7.753 3871 | 7.775 1242 | 7.795 8250 | 7.815 5837 | 7.834 4825 | 31 |
| 30 | 7.730 8957 | 7.753 7584 | 7.775 4774 | 7.796 1617 | 7.815 9055 | 7.834 7906 | 30 |
| 31 | 7.731 2868 | 7.754 1294 | 7.775 8303 | 7.796 4983 | 7.816 2271 | 7.835 0985 | 29 |
| 32 | 7.731 6776 | 7.754 5001 | 7.776 1830 | 7.796 8345 | 7.816 5484 | 7.835 4062 | 28 |
| 33 | 7.732 0679 | 7.754 8705 | 7.776 5354 | 7.797 1705 | 7.816 8695 | 7.835 7136 | 27 |
| 34 | 7.732 4579 | 7.755 2406 | 7.776 8874 | 7.797 5063 | 7.817 1904 | 7.836 0209 | 26 |
| 35 | 7.732 8476 | 7.755 6104 | 7.777 2392 | 7.797 8418 | 7.817 5110 | 7.836 3279 | 25 |
| 36 | 7.733 2369 | 7.755 9798 | 7.777 5907 | 7.798 1770 | 7.817 8314 | 7.836 6347 | 24 |
| 37 | 7.733 6259 | 7.756 3490 | 7.777 9420 | 7.798 5120 | 7.818 1516 | 7.836 9413 | 23 |
| 38 | 7.734 0145 | 7.756 7178 | 7.778 2929 | 7.798 8467 | 7.818 4715 | 7.837 2477 | 22 |
| 39 | 7.734 4028 | 7.757 0863 | 7.778 6436 | 7.799 1811 | 7.818 7912 | 7.837 5538 | 21 |
| 40 | 7.734 7908 | 7.757 4545 | 7.778 9939 | 7.799 5153 | 7.819 1106 | 7.837 8598 | 20 |
| 41 | 7.735 1783 | 7.757 8224 | 7.779 3440 | 7.799 8493 | 7.819 4298 | 7.838 1655 | 19 |
| 42 | 7.735 5656 | 7.758 1900 | 7.779 6938 | 7.800 1830 | 7.819 7488 | 7.838 4710 | 18 |
| 43 | 7.735 9525 | 7.758 5572 | 7.780 0434 | 7.800 5164 | 7.820 0676 | 7.838 7763 | 17 |
| 44 | 7.736 3390 | 7.758 9242 | 7.780 3926 | 7.800 8496 | 7.820 3861 | 7.839 0814 | 16 |
| 45 | 7.736 7252 | 7.759 2908 | 7.780 7416 | 7.801 1825 | 7.820 7043 | 7.839 3863 | 15 |
| 46 | 7.737 1111 | 7.759 6572 | 7.781 0903 | 7.801 5151 | 7.821 0224 | 7.839 6909 | 14 |
| 47 | 7.737 4966 | 7.760 0232 | 7.781 4387 | 7.801 8475 | 7.821 3402 | 7.839 9954 | 13 |
| 48 | 7.737 8818 | 7.760 3889 | 7.781 7868 | 7.802 1797 | 7.821 6578 | 7.840 2996 | 12 |
| 49 | 7.738 2666 | 7.760 7543 | 7.782 1347 | 7.802 5116 | 7.821 9751 | 7.840 6036 | 11 |
| 50 | 7.738 6511 | 7.761 1194 | 7.782 4822 | 7.802 8432 | 7.822 2922 | 7.840 9074 | 10 |
| 51 | 7.739 0353 | 7.761 4842 | 7.782 8295 | 7.803 1746 | 7.822 6091 | 7.841 2110 | 9  |
| 52 | 7.739 4191 | 7.761 8487 | 7.783 1765 | 7.803 5058 | 7.822 9258 | 7.841 5144 | 8  |
| 53 | 7.739 8026 | 7.762 2129 | 7.783 5233 | 7.803 8367 | 7.823 2422 | 7.841 8176 | 7  |
| 54 | 7.740 1857 | 7.762 5768 | 7.783 8697 | 7.804 1673 | 7.823 5584 | 7.842 1205 | 6  |
| 55 | 7.740 5685 | 7.762 9403 | 7.784 2159 | 7.804 4977 | 7.823 8743 | 7.842 4233 | 5  |
| 56 | 7.740 9510 | 7.763 3036 | 7.784 5618 | 7.804 8278 | 7.824 1901 | 7.842 7258 | 4  |
| 57 | 7.741 3331 | 7.763 6666 | 7.784 9075 | 7.805 1577 | 7.824 5056 | 7.843 0281 | 3  |
| 58 | 7.741 7149 | 7.764 0292 | 7.785 2528 | 7.805 4873 | 7.824 8209 | 7.843 3302 | 2  |
| 59 | 7.742 0964 | 7.764 3916 | 7.785 5979 | 7.805 8167 | 7.825 1359 | 7.843 6321 | 1  |
| 60 | 7.742 4775 | 7.764 7537 | 7.785 9427 | 7.806 1458 | 7.825 4507 | 7.843 9338 | 0  |
| "  | 41'        | 40'        | 39'        | 38'        | 37'        | 36'        | "  |



| "  | 18'        | 19'        | 20'        | 21'        | 22'        | 23'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 7.719 0026 | 7.742 4841 | 7.764 7610 | 7.785 9508 | 7.806 1547 | 7.825 4604 | 60 |
| 1  | 7.719 4045 | 7.742 8649 | 7.765 1228 | 7.786 2954 | 7.806 4836 | 7.825 7750 | 59 |
| 2  | 7.719 8061 | 7.743 2454 | 7.765 4843 | 7.786 6396 | 7.806 8123 | 7.826 0894 | 58 |
| 3  | 7.720 2073 | 7.743 6255 | 7.765 8454 | 7.786 9836 | 7.807 1407 | 7.826 4036 | 57 |
| 4  | 7.720 6081 | 7.744 0053 | 7.766 2063 | 7.787 3274 | 7.807 4688 | 7.826 7175 | 56 |
| 5  | 7.721 0086 | 7.744 3848 | 7.766 5669 | 7.787 6708 | 7.807 7967 | 7.827 0312 | 55 |
| 6  | 7.721 4087 | 7.744 7640 | 7.766 9271 | 7.788 0140 | 7.808 1244 | 7.827 3446 | 54 |
| 7  | 7.721 8084 | 7.745 1428 | 7.767 2871 | 7.788 3569 | 7.808 4518 | 7.827 6579 | 53 |
| 8  | 7.722 2078 | 7.745 5212 | 7.767 6468 | 7.788 6996 | 7.808 7789 | 7.827 9709 | 52 |
| 9  | 7.722 6068 | 7.745 8994 | 7.768 0061 | 7.789 0420 | 7.809 1059 | 7.828 2837 | 51 |
| 10 | 7.723 0054 | 7.746 2772 | 7.768 3652 | 7.789 3841 | 7.809 4325 | 7.828 5962 | 50 |
| 11 | 7.723 4037 | 7.746 6547 | 7.768 7240 | 7.789 7259 | 7.809 7590 | 7.828 9086 | 49 |
| 12 | 7.723 8016 | 7.747 0319 | 7.769 0825 | 7.790 0675 | 7.810 0851 | 7.829 2207 | 48 |
| 13 | 7.724 1991 | 7.747 4087 | 7.769 4407 | 7.790 4088 | 7.810 4111 | 7.829 5326 | 47 |
| 14 | 7.724 5963 | 7.747 7852 | 7.769 7986 | 7.790 7498 | 7.810 7368 | 7.829 8443 | 46 |
| 15 | 7.724 9931 | 7.748 1614 | 7.770 1562 | 7.791 0906 | 7.811 0622 | 7.830 1557 | 45 |
| 16 | 7.725 3895 | 7.748 5372 | 7.770 5135 | 7.791 4311 | 7.811 3874 | 7.830 4669 | 44 |
| 17 | 7.725 7856 | 7.748 9128 | 7.770 8705 | 7.791 7713 | 7.811 7124 | 7.830 7779 | 43 |
| 18 | 7.726 1813 | 7.749 2880 | 7.771 2272 | 7.792 1113 | 7.812 0371 | 7.831 0887 | 42 |
| 19 | 7.726 5767 | 7.749 6629 | 7.771 5836 | 7.792 4510 | 7.812 3615 | 7.831 3992 | 41 |
| 20 | 7.726 9717 | 7.750 0374 | 7.771 9398 | 7.792 7904 | 7.812 6858 | 7.831 7096 | 40 |
| 21 | 7.727 3663 | 7.750 4117 | 7.772 2956 | 7.793 1296 | 7.813 0098 | 7.832 0197 | 39 |
| 22 | 7.727 7606 | 7.750 7856 | 7.772 6512 | 7.793 4685 | 7.813 3335 | 7.832 3296 | 38 |
| 23 | 7.728 1545 | 7.751 1592 | 7.773 0064 | 7.793 8071 | 7.813 6570 | 7.832 6392 | 37 |
| 24 | 7.728 5481 | 7.751 5325 | 7.773 3614 | 7.794 1455 | 7.813 9803 | 7.832 9487 | 36 |
| 25 | 7.728 9413 | 7.751 9054 | 7.773 7161 | 7.794 4836 | 7.814 3033 | 7.833 2579 | 35 |
| 26 | 7.729 3342 | 7.752 2780 | 7.774 0705 | 7.794 8215 | 7.814 6261 | 7.833 5669 | 34 |
| 27 | 7.729 7267 | 7.752 6504 | 7.774 4246 | 7.795 1590 | 7.814 9486 | 7.833 8757 | 33 |
| 28 | 7.730 1188 | 7.753 0224 | 7.774 7784 | 7.795 4964 | 7.815 2709 | 7.834 1843 | 32 |
| 29 | 7.730 5106 | 7.753 3940 | 7.775 1319 | 7.795 8334 | 7.815 5930 | 7.834 4926 | 31 |
| 30 | 7.730 9020 | 7.753 7654 | 7.775 4851 | 7.796 1702 | 7.815 9148 | 7.834 8007 | 30 |
| 31 | 7.731 2931 | 7.754 1364 | 7.775 8381 | 7.796 5068 | 7.816 2364 | 7.835 1087 | 29 |
| 32 | 7.731 6839 | 7.754 5072 | 7.776 1907 | 7.796 8431 | 7.816 5578 | 7.835 4163 | 28 |
| 33 | 7.732 0742 | 7.754 8776 | 7.776 5431 | 7.797 1791 | 7.816 8789 | 7.835 7238 | 27 |
| 34 | 7.732 4643 | 7.755 2477 | 7.776 8952 | 7.797 5148 | 7.817 1998 | 7.836 0311 | 26 |
| 35 | 7.732 8540 | 7.755 6174 | 7.777 2470 | 7.797 8503 | 7.817 5204 | 7.836 3381 | 25 |
| 36 | 7.733 2433 | 7.755 9869 | 7.777 5985 | 7.798 1856 | 7.817 8408 | 7.836 6449 | 24 |
| 37 | 7.733 6323 | 7.756 3560 | 7.777 9498 | 7.798 5206 | 7.818 1610 | 7.836 9515 | 23 |
| 38 | 7.734 0209 | 7.756 7249 | 7.778 3007 | 7.798 8553 | 7.818 4809 | 7.837 2579 | 22 |
| 39 | 7.734 4092 | 7.757 0934 | 7.778 6514 | 7.799 1898 | 7.818 8006 | 7.837 5641 | 21 |
| 40 | 7.734 7972 | 7.757 4616 | 7.779 0018 | 7.799 5240 | 7.819 1201 | 7.837 8701 | 20 |
| 41 | 7.735 1848 | 7.757 8295 | 7.779 3519 | 7.799 8579 | 7.819 4392 | 7.838 1758 | 19 |
| 42 | 7.735 5720 | 7.758 1971 | 7.779 7017 | 7.800 1916 | 7.819 7583 | 7.838 4813 | 18 |
| 43 | 7.735 9589 | 7.758 5644 | 7.780 0513 | 7.800 5251 | 7.820 0770 | 7.838 7867 | 17 |
| 44 | 7.736 3455 | 7.758 9313 | 7.780 4005 | 7.800 8582 | 7.820 3956 | 7.839 0918 | 16 |
| 45 | 7.736 7317 | 7.759 2980 | 7.780 7495 | 7.801 1912 | 7.820 7139 | 7.839 3966 | 15 |
| 46 | 7.737 1176 | 7.759 6643 | 7.781 0982 | 7.801 5238 | 7.821 0319 | 7.839 7013 | 14 |
| 47 | 7.737 5031 | 7.760 0304 | 7.781 4466 | 7.801 8563 | 7.821 3497 | 7.840 0058 | 13 |
| 48 | 7.737 8883 | 7.760 3961 | 7.781 7948 | 7.802 1884 | 7.821 6673 | 7.840 3100 | 12 |
| 49 | 7.738 2731 | 7.760 7615 | 7.782 1426 | 7.802 5203 | 7.821 9847 | 7.840 6140 | 11 |
| 50 | 7.738 6577 | 7.761 1266 | 7.782 4902 | 7.802 8520 | 7.822 3018 | 7.840 9179 | 10 |
| 51 | 7.739 0418 | 7.761 4915 | 7.782 8375 | 7.803 1834 | 7.822 6187 | 7.841 2215 | 9  |
| 52 | 7.739 4257 | 7.761 8560 | 7.783 1845 | 7.803 5146 | 7.822 9354 | 7.841 5249 | 8  |
| 53 | 7.739 8091 | 7.762 2202 | 7.783 5313 | 7.803 8455 | 7.823 2518 | 7.841 8280 | 7  |
| 54 | 7.740 1923 | 7.762 5840 | 7.783 8778 | 7.804 1761 | 7.823 5680 | 7.842 1310 | 6  |
| 55 | 7.740 5751 | 7.762 9476 | 7.784 2240 | 7.804 5065 | 7.823 8840 | 7.842 4338 | 5  |
| 56 | 7.740 9576 | 7.763 3109 | 7.784 5699 | 7.804 8366 | 7.824 1997 | 7.842 7363 | 4  |
| 57 | 7.741 3397 | 7.763 6739 | 7.784 9155 | 7.805 1665 | 7.824 5153 | 7.843 0387 | 3  |
| 58 | 7.741 7215 | 7.764 0366 | 7.785 2609 | 7.805 4962 | 7.824 8305 | 7.843 3408 | 2  |
| 59 | 7.742 1030 | 7.764 3989 | 7.785 6060 | 7.805 8256 | 7.825 1456 | 7.843 6427 | 1  |
| 60 | 7.742 4841 | 7.764 7610 | 7.785 9508 | 7.806 1547 | 7.825 4604 | 7.843 9444 | 0  |
| "  | 41'        | 40'        | 39'        | 38'        | 37'        | 36'        | "  |



| "  | 24'        | 25'        | 26'        | 27'        | 28'        | 29'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 7.843 9138 | 7.861 6641 | 7.879 4144 | 7.897 1647 | 7.914 9150 | 7.932 6653 | 60 |
| 1  | 7.844 2153 | 7.861 9313 | 7.879 6916 | 7.897 4419 | 7.915 1922 | 7.932 9425 | 59 |
| 2  | 7.844 5160 | 7.862 2310 | 7.880 0003 | 7.897 7426 | 7.915 4929 | 7.933 2432 | 58 |
| 3  | 7.844 8177 | 7.862 5317 | 7.880 3010 | 7.898 0433 | 7.915 7936 | 7.933 5439 | 57 |
| 4  | 7.845 1185 | 7.862 8324 | 7.880 6017 | 7.898 3440 | 7.916 0943 | 7.933 8446 | 56 |
| 5  | 7.845 4193 | 7.863 1331 | 7.880 9024 | 7.898 6447 | 7.916 3950 | 7.934 1453 | 55 |
| 6  | 7.845 7206 | 7.863 4338 | 7.881 2031 | 7.898 9454 | 7.916 6957 | 7.934 4460 | 54 |
| 7  | 7.846 0218 | 7.863 7345 | 7.881 5038 | 7.899 2461 | 7.916 9964 | 7.934 7467 | 53 |
| 8  | 7.846 3229 | 7.864 0352 | 7.881 8045 | 7.899 5468 | 7.917 2971 | 7.935 0474 | 52 |
| 9  | 7.846 6237 | 7.864 3359 | 7.882 1052 | 7.899 8475 | 7.917 5978 | 7.935 3481 | 51 |
| 10 | 7.846 9241 | 7.864 6366 | 7.882 4059 | 7.900 1482 | 7.917 8985 | 7.935 6488 | 50 |
| 11 | 7.847 2247 | 7.864 9373 | 7.882 7066 | 7.900 4489 | 7.918 1992 | 7.935 9495 | 49 |
| 12 | 7.847 5253 | 7.865 2380 | 7.883 0073 | 7.900 7496 | 7.918 5000 | 7.936 2502 | 48 |
| 13 | 7.847 8260 | 7.865 5387 | 7.883 3080 | 7.901 0503 | 7.918 8007 | 7.936 5509 | 47 |
| 14 | 7.848 1267 | 7.865 8394 | 7.883 6087 | 7.901 3510 | 7.919 1014 | 7.936 8516 | 46 |
| 15 | 7.848 4273 | 7.866 1401 | 7.883 9094 | 7.901 6517 | 7.919 4021 | 7.937 1523 | 45 |
| 16 | 7.848 7280 | 7.866 4408 | 7.884 2101 | 7.901 9524 | 7.919 7028 | 7.937 4530 | 44 |
| 17 | 7.849 0288 | 7.866 7415 | 7.884 5108 | 7.902 2531 | 7.920 0035 | 7.937 7537 | 43 |
| 18 | 7.849 3294 | 7.867 0422 | 7.884 8115 | 7.902 5538 | 7.920 3042 | 7.938 0544 | 42 |
| 19 | 7.849 6301 | 7.867 3429 | 7.885 1122 | 7.902 8545 | 7.920 6049 | 7.938 3551 | 41 |
| 20 | 7.849 9308 | 7.867 6436 | 7.885 4129 | 7.903 1552 | 7.920 9056 | 7.938 6558 | 40 |
| 21 | 7.850 2315 | 7.867 9443 | 7.885 7136 | 7.903 4559 | 7.921 2063 | 7.938 9565 | 39 |
| 22 | 7.850 5322 | 7.868 2450 | 7.886 0143 | 7.903 7566 | 7.921 5070 | 7.939 2572 | 38 |
| 23 | 7.850 8329 | 7.868 5457 | 7.886 3150 | 7.904 0573 | 7.921 8077 | 7.939 5579 | 37 |
| 24 | 7.851 1336 | 7.868 8464 | 7.886 6157 | 7.904 3580 | 7.922 1084 | 7.939 8586 | 36 |
| 25 | 7.851 4343 | 7.869 1471 | 7.886 9164 | 7.904 6587 | 7.922 4091 | 7.940 1593 | 35 |
| 26 | 7.851 7350 | 7.869 4478 | 7.887 2171 | 7.904 9594 | 7.922 7098 | 7.940 4600 | 34 |
| 27 | 7.852 0357 | 7.869 7485 | 7.887 5178 | 7.905 2601 | 7.923 0105 | 7.940 7607 | 33 |
| 28 | 7.852 3364 | 7.870 0492 | 7.887 8185 | 7.905 5608 | 7.923 3112 | 7.941 0614 | 32 |
| 29 | 7.852 6371 | 7.870 3499 | 7.888 1192 | 7.905 8615 | 7.923 6119 | 7.941 3621 | 31 |
| 30 | 7.852 9378 | 7.870 6506 | 7.888 4199 | 7.906 1622 | 7.923 9126 | 7.941 6628 | 30 |
| 31 | 7.853 2385 | 7.870 9513 | 7.888 7206 | 7.906 4629 | 7.924 2133 | 7.941 9635 | 29 |
| 32 | 7.853 5392 | 7.871 2520 | 7.889 0213 | 7.906 7636 | 7.924 5140 | 7.942 2642 | 28 |
| 33 | 7.853 8400 | 7.871 5527 | 7.889 3220 | 7.907 0643 | 7.924 8147 | 7.942 5649 | 27 |
| 34 | 7.854 1407 | 7.871 8534 | 7.889 6227 | 7.907 3650 | 7.925 1154 | 7.942 8656 | 26 |
| 35 | 7.854 4414 | 7.872 1541 | 7.889 9234 | 7.907 6657 | 7.925 4161 | 7.943 1663 | 25 |
| 36 | 7.854 7421 | 7.872 4548 | 7.890 2241 | 7.907 9664 | 7.925 7168 | 7.943 4670 | 24 |
| 37 | 7.855 0428 | 7.872 7555 | 7.890 5248 | 7.908 2671 | 7.926 0175 | 7.943 7677 | 23 |
| 38 | 7.855 3435 | 7.873 0562 | 7.890 8255 | 7.908 5678 | 7.926 3182 | 7.944 0684 | 22 |
| 39 | 7.855 6442 | 7.873 3569 | 7.891 1262 | 7.908 8685 | 7.926 6189 | 7.944 3691 | 21 |
| 40 | 7.855 9449 | 7.873 6576 | 7.891 4269 | 7.909 1692 | 7.926 9196 | 7.944 6698 | 20 |
| 41 | 7.856 2456 | 7.873 9583 | 7.891 7276 | 7.909 4699 | 7.927 2203 | 7.944 9705 | 19 |
| 42 | 7.856 5463 | 7.874 2590 | 7.892 0283 | 7.909 7706 | 7.927 5210 | 7.945 2712 | 18 |
| 43 | 7.856 8470 | 7.874 5597 | 7.892 3290 | 7.910 0713 | 7.927 8217 | 7.945 5719 | 17 |
| 44 | 7.857 1477 | 7.874 8604 | 7.892 6297 | 7.910 3720 | 7.928 1224 | 7.945 8726 | 16 |
| 45 | 7.857 4484 | 7.875 1611 | 7.892 9304 | 7.910 6727 | 7.928 4231 | 7.946 1733 | 15 |
| 46 | 7.857 7491 | 7.875 4618 | 7.893 2311 | 7.910 9734 | 7.928 7238 | 7.946 4740 | 14 |
| 47 | 7.858 0498 | 7.875 7625 | 7.893 5318 | 7.911 2741 | 7.929 0245 | 7.946 7747 | 13 |
| 48 | 7.858 3505 | 7.876 0632 | 7.893 8325 | 7.911 5748 | 7.929 3252 | 7.947 0754 | 12 |
| 49 | 7.858 6512 | 7.876 3639 | 7.894 1332 | 7.911 8755 | 7.929 6259 | 7.947 3761 | 11 |
| 50 | 7.858 9519 | 7.876 6646 | 7.894 4339 | 7.912 1762 | 7.929 9266 | 7.947 6768 | 10 |
| 51 | 7.859 2526 | 7.876 9653 | 7.894 7346 | 7.912 4769 | 7.930 2273 | 7.947 9775 | 9  |
| 52 | 7.859 5533 | 7.877 2660 | 7.895 0353 | 7.912 7776 | 7.930 5280 | 7.948 2782 | 8  |
| 53 | 7.859 8540 | 7.877 5667 | 7.895 3360 | 7.913 0783 | 7.930 8287 | 7.948 5789 | 7  |
| 54 | 7.860 1547 | 7.877 8674 | 7.895 6367 | 7.913 3790 | 7.931 1294 | 7.948 8796 | 6  |
| 55 | 7.860 4554 | 7.878 1681 | 7.895 9374 | 7.913 6797 | 7.931 4301 | 7.949 1803 | 5  |
| 56 | 7.860 7561 | 7.878 4688 | 7.896 2381 | 7.913 9804 | 7.931 7308 | 7.949 4810 | 4  |
| 57 | 7.861 0568 | 7.878 7695 | 7.896 5388 | 7.914 2811 | 7.932 0315 | 7.949 7817 | 3  |
| 58 | 7.861 3575 | 7.879 0702 | 7.896 8395 | 7.914 5818 | 7.932 3322 | 7.950 0824 | 2  |
| 59 | 7.861 6582 | 7.879 3709 | 7.897 1402 | 7.914 8825 | 7.932 6329 | 7.950 3831 | 1  |
| 60 | 7.861 9589 | 7.879 6716 | 7.897 4409 | 7.915 1832 | 7.932 9336 | 7.950 6838 | 0  |
| "  | 86'        | 84'        | 83'        | 82'        | 81'        | 80'        | "  |



| "  | 24'        | 25'        | 26'        | 27'        | 28'        | 29'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 7.843 9444 | 7.861 6738 | 7.878 7077 | 7.895 0988 | 7.910 8938 | 7.926 1344 | 60 |
| 1  | 7.844 2459 | 7.861 9632 | 7.878 9861 | 7.895 3668 | 7.911 1522 | 7.926 3840 | 59 |
| 2  | 7.844 5472 | 7.862 2525 | 7.879 2642 | 7.895 6347 | 7.911 4105 | 7.926 6333 | 58 |
| 3  | 7.844 8483 | 7.862 5415 | 7.879 5422 | 7.895 9023 | 7.911 6686 | 7.926 8826 | 57 |
| 4  | 7.845 1492 | 7.862 8304 | 7.879 8199 | 7.896 1699 | 7.911 9266 | 7.927 1317 | 56 |
| 5  | 7.845 4498 | 7.863 1191 | 7.880 0975 | 7.896 4372 | 7.912 1844 | 7.927 3807 | 55 |
| 6  | 7.845 7503 | 7.863 4076 | 7.880 3750 | 7.896 7044 | 7.912 4421 | 7.927 6295 | 54 |
| 7  | 7.846 0505 | 7.863 6958 | 7.880 6522 | 7.896 9714 | 7.912 6996 | 7.927 8782 | 53 |
| 8  | 7.846 3506 | 7.863 9839 | 7.880 9293 | 7.897 2383 | 7.912 9570 | 7.928 1267 | 52 |
| 9  | 7.846 6504 | 7.864 2719 | 7.881 2062 | 7.897 5050 | 7.913 2142 | 7.928 3751 | 51 |
| 10 | 7.846 9500 | 7.864 5596 | 7.881 4829 | 7.897 7715 | 7.913 4713 | 7.928 6233 | 50 |
| 11 | 7.847 2494 | 7.864 8471 | 7.881 7594 | 7.898 0379 | 7.913 7282 | 7.928 8714 | 49 |
| 12 | 7.847 5487 | 7.865 1344 | 7.882 0358 | 7.898 3041 | 7.913 9850 | 7.929 1194 | 48 |
| 13 | 7.847 8477 | 7.865 4216 | 7.882 3120 | 7.898 5701 | 7.914 2416 | 7.929 3672 | 47 |
| 14 | 7.848 1465 | 7.865 7085 | 7.882 5880 | 7.898 8360 | 7.914 4980 | 7.929 6149 | 46 |
| 15 | 7.848 4451 | 7.865 9953 | 7.882 8639 | 7.899 1017 | 7.914 7543 | 7.929 8625 | 45 |
| 16 | 7.848 7435 | 7.866 2819 | 7.883 1395 | 7.899 3673 | 7.915 0105 | 7.930 1099 | 44 |
| 17 | 7.849 0416 | 7.866 5683 | 7.883 4150 | 7.899 6327 | 7.915 2665 | 7.930 3571 | 43 |
| 18 | 7.849 3396 | 7.866 8545 | 7.883 6903 | 7.899 8979 | 7.915 5224 | 7.930 6043 | 42 |
| 19 | 7.849 6374 | 7.867 1405 | 7.883 9655 | 7.900 1630 | 7.915 7781 | 7.930 8512 | 41 |
| 20 | 7.849 9350 | 7.867 4263 | 7.884 2404 | 7.900 4279 | 7.916 0336 | 7.931 0981 | 40 |
| 21 | 7.850 2323 | 7.867 7120 | 7.884 5152 | 7.900 6926 | 7.916 2890 | 7.931 3448 | 39 |
| 22 | 7.850 5295 | 7.867 9974 | 7.884 7899 | 7.900 9572 | 7.916 5443 | 7.931 5913 | 38 |
| 23 | 7.850 8265 | 7.868 2827 | 7.885 0643 | 7.901 2216 | 7.916 7994 | 7.931 8378 | 37 |
| 24 | 7.851 1232 | 7.868 5677 | 7.885 3386 | 7.901 4859 | 7.917 0543 | 7.932 0840 | 36 |
| 25 | 7.851 4198 | 7.868 8526 | 7.885 6127 | 7.901 7500 | 7.917 3091 | 7.932 3302 | 35 |
| 26 | 7.851 7161 | 7.869 1373 | 7.885 8866 | 7.902 0139 | 7.917 5638 | 7.932 5762 | 34 |
| 27 | 7.852 0123 | 7.869 4218 | 7.886 1604 | 7.902 2777 | 7.917 8183 | 7.932 8220 | 33 |
| 28 | 7.852 3083 | 7.869 7062 | 7.886 4339 | 7.902 5413 | 7.918 0727 | 7.933 0678 | 32 |
| 29 | 7.852 6040 | 7.869 9903 | 7.886 7074 | 7.902 8048 | 7.918 3269 | 7.933 3133 | 31 |
| 30 | 7.852 8996 | 7.870 2743 | 7.886 9806 | 7.903 0681 | 7.918 5809 | 7.933 5588 | 30 |
| 31 | 7.853 1949 | 7.870 5580 | 7.887 2537 | 7.903 3312 | 7.918 8348 | 7.933 8041 | 29 |
| 32 | 7.853 4900 | 7.870 8416 | 7.887 5266 | 7.903 5942 | 7.919 0886 | 7.934 0493 | 28 |
| 33 | 7.853 7850 | 7.871 1250 | 7.887 7993 | 7.903 8570 | 7.919 3422 | 7.934 2943 | 27 |
| 34 | 7.854 0797 | 7.871 4082 | 7.888 0718 | 7.904 1197 | 7.919 5957 | 7.934 5392 | 26 |
| 35 | 7.854 3743 | 7.871 6913 | 7.888 3442 | 7.904 3822 | 7.919 8490 | 7.934 7839 | 25 |
| 36 | 7.854 6686 | 7.871 9741 | 7.888 6164 | 7.904 6445 | 7.920 1022 | 7.935 0286 | 24 |
| 37 | 7.854 9628 | 7.872 2568 | 7.888 8885 | 7.904 9067 | 7.920 3552 | 7.935 2730 | 23 |
| 38 | 7.855 2567 | 7.872 5393 | 7.889 1603 | 7.905 1687 | 7.920 6081 | 7.935 5174 | 22 |
| 39 | 7.855 5505 | 7.872 8215 | 7.889 4320 | 7.905 4306 | 7.920 8608 | 7.935 7616 | 21 |
| 40 | 7.855 8440 | 7.873 1037 | 7.889 7036 | 7.905 6923 | 7.921 1134 | 7.936 0057 | 20 |
| 41 | 7.856 1374 | 7.873 3856 | 7.889 9749 | 7.905 9539 | 7.921 3658 | 7.936 2496 | 19 |
| 42 | 7.856 4305 | 7.873 6673 | 7.890 2461 | 7.906 2153 | 7.921 6181 | 7.936 4934 | 18 |
| 43 | 7.856 7235 | 7.873 9489 | 7.890 5171 | 7.906 4765 | 7.921 8702 | 7.936 7370 | 17 |
| 44 | 7.857 0163 | 7.874 2303 | 7.890 7880 | 7.906 7376 | 7.922 1222 | 7.936 9805 | 16 |
| 45 | 7.857 3088 | 7.874 5115 | 7.891 0587 | 7.906 9985 | 7.922 3741 | 7.937 2239 | 15 |
| 46 | 7.857 6012 | 7.874 7925 | 7.891 3292 | 7.907 2593 | 7.922 6258 | 7.937 4672 | 14 |
| 47 | 7.857 8934 | 7.875 0733 | 7.891 5995 | 7.907 5199 | 7.922 8774 | 7.937 7103 | 13 |
| 48 | 7.858 1853 | 7.875 3540 | 7.891 8697 | 7.907 7804 | 7.923 1288 | 7.937 9533 | 12 |
| 49 | 7.858 4771 | 7.875 6344 | 7.892 1397 | 7.908 0407 | 7.923 3800 | 7.938 1961 | 11 |
| 50 | 7.858 7687 | 7.875 9147 | 7.892 4096 | 7.908 3008 | 7.923 6312 | 7.938 4388 | 10 |
| 51 | 7.859 0601 | 7.876 1949 | 7.892 6792 | 7.908 5608 | 7.923 8821 | 7.938 6814 | 9  |
| 52 | 7.859 3513 | 7.876 4748 | 7.892 9487 | 7.908 8207 | 7.924 1330 | 7.938 9238 | 8  |
| 53 | 7.859 6423 | 7.876 7545 | 7.893 2181 | 7.909 0803 | 7.924 3836 | 7.939 1661 | 7  |
| 54 | 7.859 9331 | 7.877 0341 | 7.893 4873 | 7.909 3399 | 7.924 6342 | 7.939 4083 | 6  |
| 55 | 7.860 2237 | 7.877 3135 | 7.893 7563 | 7.909 5992 | 7.924 8846 | 7.939 6503 | 5  |
| 56 | 7.860 5141 | 7.877 5927 | 7.894 0251 | 7.909 8584 | 7.925 1348 | 7.939 8922 | 4  |
| 57 | 7.860 8043 | 7.877 8717 | 7.894 2938 | 7.910 1175 | 7.925 3850 | 7.940 1339 | 3  |
| 58 | 7.861 0943 | 7.878 1506 | 7.894 5623 | 7.910 3764 | 7.925 6349 | 7.940 3756 | 2  |
| 59 | 7.861 3841 | 7.878 4293 | 7.894 8306 | 7.910 6352 | 7.925 8847 | 7.940 6170 | 1  |
| 60 | 7.861 6738 | 7.878 7077 | 7.895 0988 | 7.910 8938 | 7.926 1344 | 7.940 8584 | 0  |
| "  | 85'        | 34'        | 88'        | 32'        | 81'        | 80'        | "  |



| "  | 30'        | 31'        | 32'        | 33'        | 34'        | 35'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 7.940 8419 | 7.955 0819 | 7.968 8698 | 7.983 5314 | 7.995 1970 | 8.000 2863 | 60 |
| 1  | 7.941 0831 | 7.955 3153 | 7.969 0960 | 7.982 4327 | 7.995 4108 | 8.000 6934 | 59 |
| 2  | 7.941 3241 | 7.955 5486 | 7.969 3220 | 7.982 6718 | 7.995 6415 | 8.000 9201 | 58 |
| 3  | 7.941 5651 | 7.955 7818 | 7.969 5479 | 7.982 9109 | 7.995 8704 | 8.001 1470 | 57 |
| 4  | 7.941 8059 | 7.956 0149 | 7.969 7736 | 7.983 1498 | 7.996 1017 | 8.001 3741 | 56 |
| 5  | 7.942 0465 | 7.956 2378 | 7.969 9993 | 7.983 3887 | 7.996 3304 | 8.001 6012 | 55 |
| 6  | 7.942 2871 | 7.956 4606 | 7.970 2248 | 7.983 6274 | 7.996 5591 | 8.001 8282 | 54 |
| 7  | 7.942 5275 | 7.956 7133 | 7.970 4503 | 7.983 8663 | 7.996 7876 | 8.002 0558 | 53 |
| 8  | 7.942 7677 | 7.956 9358 | 7.970 6756 | 7.984 1053 | 7.997 0164 | 8.002 2834 | 52 |
| 9  | 7.943 0079 | 7.957 1782 | 7.970 9008 | 7.984 3442 | 7.997 2451 | 8.002 5110 | 51 |
| 10 | 7.943 2479 | 7.957 4105 | 7.971 1258 | 7.984 5833 | 7.997 4736 | 8.002 7392 | 50 |
| 11 | 7.943 4877 | 7.957 6427 | 7.971 3508 | 7.984 8224 | 7.997 7021 | 8.002 9675 | 49 |
| 12 | 7.943 7275 | 7.957 8747 | 7.971 5756 | 7.985 0614 | 7.997 9304 | 8.003 1954 | 48 |
| 13 | 7.943 9671 | 7.958 1067 | 7.971 8004 | 7.985 3004 | 7.998 1586 | 8.003 4231 | 47 |
| 14 | 7.944 2066 | 7.958 3385 | 7.972 0250 | 7.985 5393 | 7.998 3867 | 8.003 6507 | 46 |
| 15 | 7.944 4459 | 7.958 5703 | 7.972 2495 | 7.985 7783 | 7.998 6147 | 8.003 8786 | 45 |
| 16 | 7.944 6851 | 7.958 8019 | 7.972 4738 | 7.986 0172 | 7.998 8426 | 8.004 1062 | 44 |
| 17 | 7.944 9242 | 7.959 0311 | 7.972 6981 | 7.986 2561 | 7.999 0704 | 8.004 3341 | 43 |
| 18 | 7.945 1631 | 7.959 2645 | 7.972 9224 | 7.986 4950 | 7.999 2981 | 8.004 5618 | 42 |
| 19 | 7.945 4019 | 7.959 4956 | 7.973 1464 | 7.986 7339 | 7.999 5257 | 8.004 7894 | 41 |
| 20 | 7.945 6406 | 7.959 7267 | 7.973 3703 | 7.986 9728 | 7.999 7532 | 8.005 0169 | 40 |
| 21 | 7.945 8792 | 7.959 9576 | 7.973 5941 | 7.987 2117 | 7.999 9807 | 8.005 2444 | 39 |
| 22 | 7.946 1176 | 7.960 1885 | 7.973 8177 | 7.987 4506 | 8.000 2081 | 8.005 4719 | 38 |
| 23 | 7.946 3559 | 7.960 4192 | 7.974 0412 | 7.987 6895 | 8.000 4354 | 8.005 7000 | 37 |
| 24 | 7.946 5940 | 7.960 6497 | 7.974 2647 | 7.987 9284 | 8.000 6627 | 8.005 9275 | 36 |
| 25 | 7.946 8311 | 7.960 8802 | 7.974 4880 | 7.988 1673 | 8.000 8900 | 8.006 1550 | 35 |
| 26 | 7.947 0700 | 7.961 1105 | 7.974 7113 | 7.988 4062 | 8.001 1173 | 8.006 3825 | 34 |
| 27 | 7.947 3077 | 7.961 3407 | 7.974 9344 | 7.988 6451 | 8.001 3446 | 8.006 6100 | 33 |
| 28 | 7.947 5454 | 7.961 5708 | 7.975 1574 | 7.988 8840 | 8.001 5719 | 8.006 8375 | 32 |
| 29 | 7.947 7829 | 7.961 8008 | 7.975 3803 | 7.989 1229 | 8.001 7992 | 8.007 0650 | 31 |
| 30 | 7.948 0203 | 7.962 0306 | 7.975 6030 | 7.989 3618 | 8.002 0265 | 8.007 2925 | 30 |
| 31 | 7.948 2575 | 7.962 2603 | 7.975 8257 | 7.989 5997 | 8.002 2538 | 8.007 5200 | 29 |
| 32 | 7.948 4946 | 7.962 4899 | 7.976 0482 | 7.989 8386 | 8.002 4811 | 8.007 7475 | 28 |
| 33 | 7.948 7316 | 7.962 7194 | 7.976 2706 | 7.989 8386 | 8.002 7084 | 8.007 9750 | 27 |
| 34 | 7.948 9685 | 7.962 9487 | 7.976 4929 | 7.989 8386 | 8.002 9357 | 8.008 1975 | 26 |
| 35 | 7.949 2052 | 7.963 1780 | 7.976 7151 | 7.989 8386 | 8.003 1630 | 8.008 4250 | 25 |
| 36 | 7.949 4418 | 7.963 4071 | 7.976 9372 | 7.989 8386 | 8.003 3903 | 8.008 6475 | 24 |
| 37 | 7.949 6783 | 7.963 6361 | 7.977 1592 | 7.989 8386 | 8.003 6176 | 8.008 8700 | 23 |
| 38 | 7.949 9146 | 7.963 8649 | 7.977 3810 | 7.989 8386 | 8.003 8449 | 8.009 0925 | 22 |
| 39 | 7.950 1508 | 7.964 0937 | 7.977 6028 | 7.989 8386 | 8.004 0722 | 8.009 3150 | 21 |
| 40 | 7.950 3869 | 7.964 3224 | 7.977 8244 | 7.989 8386 | 8.004 2995 | 8.009 5375 | 20 |
| 41 | 7.950 6229 | 7.964 5508 | 7.978 0459 | 7.989 8386 | 8.004 5268 | 8.009 7600 | 19 |
| 42 | 7.950 8587 | 7.964 7792 | 7.978 2673 | 7.989 8386 | 8.004 7541 | 8.009 9825 | 18 |
| 43 | 7.951 0944 | 7.965 0075 | 7.978 4886 | 7.989 8386 | 8.004 9814 | 8.010 2050 | 17 |
| 44 | 7.951 3300 | 7.965 2356 | 7.978 7098 | 7.989 8386 | 8.005 2087 | 8.010 4275 | 16 |
| 45 | 7.951 5654 | 7.965 4637 | 7.978 9309 | 7.989 8386 | 8.005 4360 | 8.010 6500 | 15 |
| 46 | 7.951 8008 | 7.965 6916 | 7.979 1518 | 7.989 8386 | 8.005 6633 | 8.010 8725 | 14 |
| 47 | 7.952 0360 | 7.965 9194 | 7.979 3726 | 7.989 8386 | 8.005 8906 | 8.011 0950 | 13 |
| 48 | 7.952 2710 | 7.966 1470 | 7.979 5934 | 7.989 8386 | 8.006 1179 | 8.011 3175 | 12 |
| 49 | 7.952 5060 | 7.966 3746 | 7.979 8140 | 7.989 8386 | 8.006 3452 | 8.011 5400 | 11 |
| 50 | 7.952 7408 | 7.966 6020 | 7.980 0345 | 7.989 8386 | 8.006 5725 | 8.011 7625 | 10 |
| 51 | 7.952 9755 | 7.966 8293 | 7.980 2549 | 7.989 8386 | 8.006 8000 | 8.011 9850 | 9  |
| 52 | 7.953 2100 | 7.967 0565 | 7.980 4753 | 7.989 8386 | 8.007 0273 | 8.012 2075 | 8  |
| 53 | 7.953 4444 | 7.967 2836 | 7.980 6953 | 7.989 8386 | 8.007 2546 | 8.012 4300 | 7  |
| 54 | 7.953 6787 | 7.967 5106 | 7.980 9154 | 7.989 8386 | 8.007 4819 | 8.012 6525 | 6  |
| 55 | 7.953 9129 | 7.967 7374 | 7.981 1353 | 7.989 8386 | 8.007 7092 | 8.012 8750 | 5  |
| 56 | 7.954 1470 | 7.967 9641 | 7.981 3552 | 7.989 8386 | 8.007 9365 | 8.013 0975 | 4  |
| 57 | 7.954 3809 | 7.968 1907 | 7.981 5749 | 7.989 8386 | 8.008 1638 | 8.013 3200 | 3  |
| 58 | 7.954 6147 | 7.968 4172 | 7.981 7943 | 7.989 8386 | 8.008 3911 | 8.013 5425 | 2  |
| 59 | 7.954 8484 | 7.968 6436 | 7.982 0140 | 7.989 8386 | 8.008 6184 | 8.013 7650 | 1  |
| 60 | 7.955 0819 | 7.968 8698 | 7.982 2334 | 7.989 8386 | 8.008 8457 | 8.013 9875 | 0  |
| "  | 30'        | 31'        | 32'        | 33'        | 34'        | 35'        | "  |



| "  | 80'        | 81'        | 82'        | 83'        | 84'        | 85'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 7.940 8584 | 7.955 0996 | 7.968 8886 | 7.982 2534 | 7.995 2192 | 8.007 8092 | 60 |
| 1  | 7.941 0996 | 7.955 3330 | 7.969 1148 | 7.982 4727 | 7.995 4320 | 8.008 0159 | 59 |
| 2  | 7.941 3407 | 7.955 5663 | 7.969 3408 | 7.982 6919 | 7.995 6448 | 8.008 2226 | 58 |
| 3  | 7.941 5817 | 7.955 7995 | 7.969 5667 | 7.982 9110 | 7.995 8574 | 8.008 4292 | 57 |
| 4  | 7.941 8225 | 7.956 0326 | 7.969 7925 | 7.983 1299 | 7.996 0700 | 8.008 6357 | 56 |
| 5  | 7.942 0632 | 7.956 2655 | 7.970 0182 | 7.983 3488 | 7.996 2824 | 8.008 8420 | 55 |
| 6  | 7.942 3037 | 7.956 4984 | 7.970 2438 | 7.983 5675 | 7.996 4947 | 8.009 0483 | 54 |
| 7  | 7.942 5441 | 7.956 7310 | 7.970 4692 | 7.983 7862 | 7.996 7070 | 8.009 2545 | 53 |
| 8  | 7.942 7844 | 7.956 9636 | 7.970 6945 | 7.984 0047 | 7.996 9191 | 8.009 4606 | 52 |
| 9  | 7.943 0246 | 7.957 1961 | 7.970 9198 | 7.984 2231 | 7.997 1311 | 8.009 6666 | 51 |
| 10 | 7.943 2646 | 7.957 4284 | 7.971 1449 | 7.984 4414 | 7.997 3430 | 8.009 8725 | 50 |
| 11 | 7.943 5045 | 7.957 6606 | 7.971 3698 | 7.984 6596 | 7.997 5548 | 8.010 0783 | 49 |
| 12 | 7.943 7442 | 7.957 8926 | 7.971 5947 | 7.984 8777 | 7.997 7666 | 8.010 2840 | 48 |
| 13 | 7.943 9839 | 7.958 1246 | 7.971 8194 | 7.985 0957 | 7.997 9782 | 8.010 4896 | 47 |
| 14 | 7.944 2233 | 7.958 3564 | 7.972 0441 | 7.985 3136 | 7.998 1897 | 8.010 6951 | 46 |
| 15 | 7.944 4627 | 7.958 5881 | 7.972 2686 | 7.985 5313 | 7.998 4011 | 8.010 9005 | 45 |
| 16 | 7.944 7019 | 7.958 8197 | 7.972 4930 | 7.985 7490 | 7.998 6124 | 8.011 1058 | 44 |
| 17 | 7.944 9410 | 7.959 0511 | 7.972 7173 | 7.985 9665 | 7.998 8236 | 8.011 3110 | 43 |
| 18 | 7.945 1800 | 7.959 2825 | 7.972 9414 | 7.986 1839 | 7.999 0346 | 8.011 5161 | 42 |
| 19 | 7.945 4188 | 7.959 5137 | 7.973 1655 | 7.986 4013 | 7.999 2456 | 8.011 7211 | 41 |
| 20 | 7.945 6575 | 7.959 7447 | 7.973 3894 | 7.986 6185 | 7.999 4565 | 8.011 9260 | 40 |
| 21 | 7.945 8961 | 7.959 9757 | 7.973 6132 | 7.986 8356 | 7.999 6673 | 8.012 1308 | 39 |
| 22 | 7.946 1345 | 7.960 2065 | 7.973 8369 | 7.987 0526 | 7.999 8780 | 8.012 3356 | 38 |
| 23 | 7.946 3728 | 7.960 4373 | 7.974 0605 | 7.987 2695 | 8.000 0886 | 8.012 5402 | 37 |
| 24 | 7.946 6110 | 7.960 6678 | 7.974 2840 | 7.987 4862 | 8.000 2991 | 8.012 7447 | 36 |
| 25 | 7.946 8491 | 7.960 8983 | 7.974 5073 | 7.987 7029 | 8.000 5094 | 8.012 9492 | 35 |
| 26 | 7.947 0870 | 7.961 1287 | 7.974 7306 | 7.987 9195 | 8.000 7197 | 8.013 1535 | 34 |
| 27 | 7.947 3248 | 7.961 3589 | 7.974 9537 | 7.988 1359 | 8.000 9299 | 8.013 3578 | 33 |
| 28 | 7.947 5624 | 7.961 5890 | 7.975 1767 | 7.988 3523 | 8.001 1400 | 8.013 5619 | 32 |
| 29 | 7.947 8000 | 7.961 8190 | 7.975 3996 | 7.988 5685 | 8.001 3499 | 8.013 7660 | 31 |
| 30 | 7.948 0374 | 7.962 0488 | 7.975 6224 | 7.988 7847 | 8.001 5598 | 8.013 9699 | 30 |
| 31 | 7.948 2746 | 7.962 2786 | 7.975 8451 | 7.989 0007 | 8.001 7696 | 8.014 1738 | 29 |
| 32 | 7.948 5118 | 7.962 5082 | 7.976 0676 | 7.989 2166 | 8.001 9792 | 8.014 3775 | 28 |
| 33 | 7.948 7488 | 7.962 7377 | 7.976 2901 | 7.989 4324 | 8.002 1888 | 8.014 5812 | 27 |
| 34 | 7.948 9856 | 7.962 9670 | 7.976 5124 | 7.989 6481 | 8.002 3983 | 8.014 7848 | 26 |
| 35 | 7.949 2224 | 7.963 1963 | 7.976 7346 | 7.989 8637 | 8.002 6076 | 8.014 9883 | 25 |
| 36 | 7.949 4590 | 7.963 4254 | 7.976 9567 | 7.990 0792 | 8.002 8169 | 8.015 1916 | 24 |
| 37 | 7.949 6955 | 7.963 6544 | 7.977 1787 | 7.990 2946 | 8.003 0260 | 8.015 3949 | 23 |
| 38 | 7.949 9319 | 7.963 8833 | 7.977 4006 | 7.990 5099 | 8.003 2351 | 8.015 5981 | 22 |
| 39 | 7.950 1681 | 7.964 1121 | 7.977 6224 | 7.990 7251 | 8.003 4441 | 8.015 8012 | 21 |
| 40 | 7.950 4042 | 7.964 3408 | 7.977 8440 | 7.990 9401 | 8.003 6529 | 8.016 0042 | 20 |
| 41 | 7.950 6402 | 7.964 5693 | 7.978 0655 | 7.991 1551 | 8.003 8617 | 8.016 2071 | 19 |
| 42 | 7.950 8760 | 7.964 7977 | 7.978 2870 | 7.991 3699 | 8.004 0703 | 8.016 4099 | 18 |
| 43 | 7.951 1118 | 7.965 0260 | 7.978 5083 | 7.991 5847 | 8.004 2789 | 8.016 6127 | 17 |
| 44 | 7.951 3474 | 7.965 2541 | 7.978 7295 | 7.991 7993 | 8.004 4874 | 8.016 8153 | 16 |
| 45 | 7.951 5828 | 7.965 4822 | 7.978 9506 | 7.992 0138 | 8.004 6957 | 8.017 0178 | 15 |
| 46 | 7.951 8182 | 7.965 7101 | 7.979 1715 | 7.992 2283 | 8.004 9040 | 8.017 2203 | 14 |
| 47 | 7.952 0534 | 7.965 9379 | 7.979 3924 | 7.992 4426 | 8.005 1121 | 8.017 4226 | 13 |
| 48 | 7.952 2885 | 7.966 1656 | 7.979 6131 | 7.992 6568 | 8.005 3202 | 8.017 6248 | 12 |
| 49 | 7.952 5234 | 7.966 3932 | 7.979 8338 | 7.992 8709 | 8.005 5282 | 8.017 8270 | 11 |
| 50 | 7.952 7582 | 7.966 6206 | 7.980 0543 | 7.993 0849 | 8.005 7360 | 8.018 0291 | 10 |
| 51 | 7.952 9929 | 7.966 8480 | 7.980 2747 | 7.993 2988 | 8.005 9438 | 8.018 2310 | 9  |
| 52 | 7.953 2275 | 7.967 0752 | 7.980 4950 | 7.993 5126 | 8.006 1514 | 8.018 4329 | 8  |
| 53 | 7.953 4620 | 7.967 3023 | 7.980 7152 | 7.993 7263 | 8.006 3590 | 8.018 6347 | 7  |
| 54 | 7.953 6963 | 7.967 5293 | 7.980 9353 | 7.993 9399 | 8.006 5665 | 8.018 8364 | 6  |
| 55 | 7.953 9305 | 7.967 7561 | 7.981 1557 | 7.994 1534 | 8.006 7738 | 8.019 0379 | 5  |
| 56 | 7.954 1646 | 7.967 9829 | 7.981 3751 | 7.994 3667 | 8.006 9811 | 8.019 2394 | 4  |
| 57 | 7.954 3985 | 7.968 2095 | 7.981 5948 | 7.994 5800 | 8.007 1883 | 8.019 4408 | 3  |
| 58 | 7.954 6323 | 7.968 4360 | 7.981 8145 | 7.994 7932 | 8.007 3953 | 8.019 6422 | 2  |
| 59 | 7.954 8660 | 7.968 6624 | 7.982 0340 | 7.995 0062 | 8.007 6023 | 8.019 8434 | 1  |
| 60 | 7.955 0996 | 7.968 8886 | 7.982 2534 | 7.995 2192 | 8.007 8092 | 8.020 0445 | 0  |
| "  | 29'        | 28'        | 27'        | 26'        | 25'        | 24'        | "  |



| "  | 86'        | 87'        | 88'        | 89'        | 40'        | 41'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.020 0207 | 8.031 9195 | 8.043 5009 | 8.054 7814 | 8.065 7763 | 8.076 4997 | 60 |
| 1  | 8.020 2217 | 8.032 1150 | 8.043 6913 | 8.054 9670 | 8.065 9572 | 8.076 6762 | 59 |
| 2  | 8.020 4226 | 8.032 3105 | 8.043 8816 | 8.055 1524 | 8.066 1381 | 8.076 8526 | 58 |
| 3  | 8.020 6234 | 8.032 5059 | 8.044 0719 | 8.055 3378 | 8.066 3188 | 8.077 0290 | 57 |
| 4  | 8.020 8242 | 8.032 7012 | 8.044 2621 | 8.055 5231 | 8.066 4995 | 8.077 2052 | 56 |
| 5  | 8.021 0248 | 8.032 8965 | 8.044 4522 | 8.055 7084 | 8.066 6801 | 8.077 3815 | 55 |
| 6  | 8.021 2253 | 8.033 0916 | 8.044 6422 | 8.055 8935 | 8.066 8606 | 8.077 5576 | 54 |
| 7  | 8.021 4258 | 8.033 2866 | 8.044 8321 | 8.056 0786 | 8.067 0411 | 8.077 7337 | 53 |
| 8  | 8.021 6261 | 8.033 4816 | 8.045 0220 | 8.056 2636 | 8.067 2215 | 8.077 9097 | 52 |
| 9  | 8.021 8264 | 8.033 6765 | 8.045 2117 | 8.056 4485 | 8.067 4018 | 8.078 0856 | 51 |
| 10 | 8.022 0266 | 8.033 8713 | 8.045 4014 | 8.056 6333 | 8.067 5820 | 8.078 2614 | 50 |
| 11 | 8.022 2267 | 8.034 0660 | 8.045 5910 | 8.056 8181 | 8.067 7622 | 8.078 4372 | 49 |
| 12 | 8.022 4267 | 8.034 2606 | 8.045 7805 | 8.057 0028 | 8.067 9423 | 8.078 6129 | 48 |
| 13 | 8.022 6266 | 8.034 4551 | 8.045 9700 | 8.057 1874 | 8.068 1223 | 8.078 7886 | 47 |
| 14 | 8.022 8264 | 8.034 6495 | 8.046 1593 | 8.057 3719 | 8.068 3022 | 8.078 9641 | 46 |
| 15 | 8.023 0261 | 8.034 8439 | 8.046 3486 | 8.057 5563 | 8.068 4821 | 8.079 1396 | 45 |
| 16 | 8.023 2257 | 8.035 0382 | 8.046 5378 | 8.057 7407 | 8.068 6619 | 8.079 3151 | 44 |
| 17 | 8.023 4252 | 8.035 2323 | 8.046 7269 | 8.057 9250 | 8.068 8416 | 8.079 4904 | 43 |
| 18 | 8.023 6247 | 8.035 4264 | 8.046 9159 | 8.058 1092 | 8.069 0212 | 8.079 6657 | 42 |
| 19 | 8.023 8240 | 8.035 6204 | 8.047 1048 | 8.058 2933 | 8.069 2008 | 8.079 8409 | 41 |
| 20 | 8.024 0233 | 8.035 8143 | 8.047 2937 | 8.058 4774 | 8.069 3803 | 8.080 0161 | 40 |
| 21 | 8.024 2224 | 8.036 0082 | 8.047 4825 | 8.058 6614 | 8.069 5597 | 8.080 1912 | 39 |
| 22 | 8.024 4215 | 8.036 2019 | 8.047 6712 | 8.058 8453 | 8.069 7390 | 8.080 3662 | 38 |
| 23 | 8.024 6205 | 8.036 3956 | 8.047 8598 | 8.059 0291 | 8.069 9183 | 8.080 5411 | 37 |
| 24 | 8.024 8194 | 8.036 5892 | 8.048 0483 | 8.059 2128 | 8.070 0975 | 8.080 7160 | 36 |
| 25 | 8.025 0182 | 8.036 7826 | 8.048 2368 | 8.059 3965 | 8.070 2766 | 8.080 8908 | 35 |
| 26 | 8.025 2169 | 8.036 9760 | 8.048 4251 | 8.059 5801 | 8.070 4557 | 8.081 0655 | 34 |
| 27 | 8.025 4155 | 8.037 1693 | 8.048 6134 | 8.059 7636 | 8.070 6346 | 8.081 2401 | 33 |
| 28 | 8.025 6140 | 8.037 3626 | 8.048 8016 | 8.059 9470 | 8.070 8135 | 8.081 4147 | 32 |
| 29 | 8.025 8125 | 8.037 5557 | 8.048 9897 | 8.060 1304 | 8.070 9923 | 8.081 5892 | 31 |
| 30 | 8.026 0108 | 8.037 7488 | 8.049 1778 | 8.060 3137 | 8.071 1711 | 8.081 7637 | 30 |
| 31 | 8.026 2091 | 8.037 9417 | 8.049 3657 | 8.060 4969 | 8.071 3498 | 8.081 9380 | 29 |
| 32 | 8.026 4072 | 8.038 1346 | 8.049 5536 | 8.060 6800 | 8.071 5284 | 8.082 1123 | 28 |
| 33 | 8.026 6053 | 8.038 3274 | 8.049 7414 | 8.060 8630 | 8.071 7069 | 8.082 2866 | 27 |
| 34 | 8.026 8033 | 8.038 5201 | 8.049 9291 | 8.061 0460 | 8.071 8854 | 8.082 4607 | 26 |
| 35 | 8.027 0012 | 8.038 7128 | 8.050 1167 | 8.061 2289 | 8.072 0637 | 8.082 6348 | 25 |
| 36 | 8.027 1990 | 8.038 9053 | 8.050 3043 | 8.061 4117 | 8.072 2421 | 8.082 8088 | 24 |
| 37 | 8.027 3967 | 8.039 0978 | 8.050 4918 | 8.061 5944 | 8.072 4203 | 8.082 9828 | 23 |
| 38 | 8.027 5943 | 8.039 2901 | 8.050 6792 | 8.061 7771 | 8.072 5985 | 8.083 1567 | 22 |
| 39 | 8.027 7919 | 8.039 4824 | 8.050 8665 | 8.061 9597 | 8.072 7765 | 8.083 3305 | 21 |
| 40 | 8.027 9893 | 8.039 6746 | 8.051 0537 | 8.062 1422 | 8.072 9546 | 8.083 5042 | 20 |
| 41 | 8.028 1867 | 8.039 8667 | 8.051 2408 | 8.062 3246 | 8.073 1325 | 8.083 6779 | 19 |
| 42 | 8.028 3839 | 8.040 0588 | 8.051 4279 | 8.062 5070 | 8.073 3104 | 8.083 8515 | 18 |
| 43 | 8.028 5811 | 8.040 2507 | 8.051 6149 | 8.062 6892 | 8.073 4882 | 8.084 0251 | 17 |
| 44 | 8.028 7782 | 8.040 4426 | 8.051 8018 | 8.062 8714 | 8.073 6659 | 8.084 1985 | 16 |
| 45 | 8.028 9752 | 8.040 6343 | 8.051 9886 | 8.063 0536 | 8.073 8436 | 8.084 3719 | 15 |
| 46 | 8.029 1721 | 8.040 8260 | 8.052 1754 | 8.063 2356 | 8.074 0211 | 8.084 5452 | 14 |
| 47 | 8.029 3689 | 8.041 0176 | 8.052 3620 | 8.063 4176 | 8.074 1986 | 8.084 7185 | 13 |
| 48 | 8.029 5656 | 8.041 2092 | 8.052 5486 | 8.063 5995 | 8.074 3761 | 8.084 8917 | 12 |
| 49 | 8.029 7623 | 8.041 4006 | 8.052 7351 | 8.063 7813 | 8.074 5534 | 8.085 0648 | 11 |
| 50 | 8.029 9588 | 8.041 5920 | 8.052 9216 | 8.063 9630 | 8.074 7307 | 8.085 2379 | 10 |
| 51 | 8.030 1553 | 8.041 7832 | 8.053 1079 | 8.064 1447 | 8.074 9080 | 8.085 4109 | 9  |
| 52 | 8.030 3517 | 8.041 9744 | 8.053 2942 | 8.064 3263 | 8.075 0851 | 8.085 5838 | 8  |
| 53 | 8.030 5479 | 8.042 1655 | 8.053 4803 | 8.064 5078 | 8.075 2622 | 8.085 7566 | 7  |
| 54 | 8.030 7441 | 8.042 3565 | 8.053 6665 | 8.064 6893 | 8.075 4392 | 8.085 9294 | 6  |
| 55 | 8.030 9403 | 8.042 5475 | 8.053 8525 | 8.064 8706 | 8.075 6161 | 8.086 1021 | 5  |
| 56 | 8.031 1363 | 8.042 7383 | 8.054 0384 | 8.065 0519 | 8.075 7930 | 8.086 2747 | 4  |
| 57 | 8.031 3322 | 8.042 9291 | 8.054 2243 | 8.065 2331 | 8.075 9698 | 8.086 4473 | 3  |
| 58 | 8.031 5280 | 8.043 1198 | 8.054 4101 | 8.065 4143 | 8.076 1465 | 8.086 6198 | 2  |
| 59 | 8.031 7238 | 8.043 3104 | 8.054 5958 | 8.065 5953 | 8.076 3231 | 8.086 7922 | 1  |
| 60 | 8.031 9195 | 8.043 5009 | 8.054 7814 | 8.065 7763 | 8.076 4997 | 8.086 9646 | 0  |
| "  | 23'        | 22'        | 21'        | 20'        | 19'        | 18'        | "  |



| "  | 36'        | 37'        | 38'        | 39'        | 40'        | 41'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.020 0445 | 8.031 9446 | 8.043 5274 | 8.054 8094 | 8.065 8057 | 8.076 5306 | 60 |
| 1  | 8.020 2455 | 8.032 1402 | 8.043 7179 | 8.054 9949 | 8.065 9866 | 8.076 7071 | 59 |
| 2  | 8.020 4465 | 8.032 3357 | 8.043 9082 | 8.055 1804 | 8.066 1675 | 8.076 8835 | 58 |
| 3  | 8.020 6473 | 8.032 5311 | 8.044 0985 | 8.055 3658 | 8.066 3483 | 8.077 0599 | 57 |
| 4  | 8.020 8481 | 8.032 7265 | 8.044 2887 | 8.055 5512 | 8.066 5290 | 8.077 2362 | 56 |
| 5  | 8.021 0487 | 8.032 9217 | 8.044 4788 | 8.055 7364 | 8.066 7096 | 8.077 4125 | 55 |
| 6  | 8.021 2493 | 8.033 1169 | 8.044 6689 | 8.055 9216 | 8.066 8902 | 8.077 5886 | 54 |
| 7  | 8.021 4498 | 8.033 3120 | 8.044 8588 | 8.056 1067 | 8.067 0707 | 8.077 7647 | 53 |
| 8  | 8.021 6501 | 8.033 5069 | 8.045 0487 | 8.056 2917 | 8.067 2511 | 8.077 9407 | 52 |
| 9  | 8.021 8504 | 8.033 7018 | 8.045 2385 | 8.056 4767 | 8.067 4314 | 8.078 1167 | 51 |
| 10 | 8.022 0506 | 8.033 8967 | 8.045 4282 | 8.056 6615 | 8.067 6117 | 8.078 2926 | 50 |
| 11 | 8.022 2507 | 8.034 0914 | 8.045 6178 | 8.056 8463 | 8.067 7919 | 8.078 4684 | 49 |
| 12 | 8.022 4507 | 8.034 2860 | 8.045 8074 | 8.057 0310 | 8.067 9720 | 8.078 6441 | 48 |
| 13 | 8.022 6507 | 8.034 4806 | 8.045 9968 | 8.057 2156 | 8.068 1520 | 8.078 8198 | 47 |
| 14 | 8.022 8505 | 8.034 6750 | 8.046 1862 | 8.057 4002 | 8.068 3320 | 8.078 9954 | 46 |
| 15 | 8.023 0502 | 8.034 8694 | 8.046 3755 | 8.057 5846 | 8.068 5118 | 8.079 1709 | 45 |
| 16 | 8.023 2499 | 8.035 0637 | 8.046 5647 | 8.057 7690 | 8.068 6917 | 8.079 3464 | 44 |
| 17 | 8.023 4494 | 8.035 2579 | 8.046 7538 | 8.057 9534 | 8.068 8714 | 8.079 5218 | 43 |
| 18 | 8.023 6489 | 8.035 4520 | 8.046 9429 | 8.058 1376 | 8.069 0511 | 8.079 6971 | 42 |
| 19 | 8.023 8483 | 8.035 6460 | 8.047 1318 | 8.058 3217 | 8.069 2306 | 8.079 8723 | 41 |
| 20 | 8.024 0475 | 8.035 8400 | 8.047 3207 | 8.058 5058 | 8.069 4102 | 8.080 0475 | 40 |
| 21 | 8.024 2467 | 8.036 0338 | 8.047 5095 | 8.058 6898 | 8.069 5896 | 8.080 2226 | 39 |
| 22 | 8.024 4458 | 8.036 2276 | 8.047 6982 | 8.058 8737 | 8.069 7690 | 8.080 3976 | 38 |
| 23 | 8.024 6448 | 8.036 4213 | 8.047 8869 | 8.059 0576 | 8.069 9483 | 8.080 5726 | 37 |
| 24 | 8.024 8437 | 8.036 6149 | 8.048 0754 | 8.059 2414 | 8.070 1275 | 8.080 7475 | 36 |
| 25 | 8.025 0426 | 8.036 8084 | 8.048 2639 | 8.059 4250 | 8.070 3066 | 8.080 9223 | 35 |
| 26 | 8.025 2413 | 8.037 0018 | 8.048 4523 | 8.059 6087 | 8.070 4857 | 8.081 0970 | 34 |
| 27 | 8.025 4399 | 8.037 1951 | 8.048 6406 | 8.059 7922 | 8.070 6647 | 8.081 2717 | 33 |
| 28 | 8.025 6385 | 8.037 3884 | 8.048 8288 | 8.059 9756 | 8.070 8436 | 8.081 4463 | 32 |
| 29 | 8.025 8369 | 8.037 5815 | 8.049 0169 | 8.060 1590 | 8.071 0225 | 8.081 6208 | 31 |
| 30 | 8.026 0353 | 8.037 7746 | 8.049 2050 | 8.060 3423 | 8.071 2012 | 8.081 7953 | 30 |
| 31 | 8.026 2336 | 8.037 9676 | 8.049 3930 | 8.060 5255 | 8.071 3799 | 8.081 9697 | 29 |
| 32 | 8.026 4318 | 8.038 1605 | 8.049 5809 | 8.060 7087 | 8.071 5586 | 8.082 1440 | 28 |
| 33 | 8.026 6299 | 8.038 3533 | 8.049 7687 | 8.060 8918 | 8.071 7371 | 8.082 3183 | 27 |
| 34 | 8.026 8279 | 8.038 5461 | 8.049 9564 | 8.061 0748 | 8.071 9156 | 8.082 4925 | 26 |
| 35 | 8.027 0258 | 8.038 7387 | 8.050 1441 | 8.061 2577 | 8.072 0940 | 8.082 6666 | 25 |
| 36 | 8.027 2236 | 8.038 9313 | 8.050 3317 | 8.061 4405 | 8.072 2723 | 8.082 8406 | 24 |
| 37 | 8.027 4213 | 8.039 1238 | 8.050 5192 | 8.061 6233 | 8.072 4506 | 8.083 0146 | 23 |
| 38 | 8.027 6190 | 8.039 3162 | 8.050 7066 | 8.061 8060 | 8.072 6288 | 8.083 1885 | 22 |
| 39 | 8.027 8166 | 8.039 5085 | 8.050 8939 | 8.061 9886 | 8.072 8069 | 8.083 3624 | 21 |
| 40 | 8.028 0140 | 8.039 7007 | 8.051 0812 | 8.062 1711 | 8.072 9850 | 8.083 5361 | 20 |
| 41 | 8.028 2114 | 8.039 8928 | 8.051 2683 | 8.062 3536 | 8.073 1629 | 8.083 7098 | 19 |
| 42 | 8.028 4087 | 8.040 0849 | 8.051 4554 | 8.062 5359 | 8.073 3408 | 8.083 8835 | 18 |
| 43 | 8.028 6059 | 8.040 2768 | 8.051 6424 | 8.062 7182 | 8.073 5186 | 8.084 0570 | 17 |
| 44 | 8.028 8030 | 8.040 4687 | 8.051 8294 | 8.062 9005 | 8.073 6964 | 8.084 2305 | 16 |
| 45 | 8.029 0000 | 8.040 6605 | 8.052 0162 | 8.063 0826 | 8.073 8741 | 8.084 4039 | 15 |
| 46 | 8.029 1969 | 8.040 8522 | 8.052 2030 | 8.063 2647 | 8.074 0517 | 8.084 5773 | 14 |
| 47 | 8.029 3938 | 8.041 0439 | 8.052 3897 | 8.063 4467 | 8.074 2292 | 8.084 7506 | 13 |
| 48 | 8.029 5905 | 8.041 2354 | 8.052 5763 | 8.063 6286 | 8.074 4067 | 8.084 9238 | 12 |
| 49 | 8.029 7872 | 8.041 4269 | 8.052 7628 | 8.063 8104 | 8.074 5841 | 8.085 0969 | 11 |
| 50 | 8.029 9838 | 8.041 6183 | 8.052 9493 | 8.063 9922 | 8.074 7614 | 8.085 2700 | 10 |
| 51 | 8.030 1802 | 8.041 8096 | 8.053 1356 | 8.064 1739 | 8.074 9386 | 8.085 4430 | 9  |
| 52 | 8.030 3766 | 8.042 0008 | 8.053 3219 | 8.064 3555 | 8.075 1158 | 8.085 6160 | 8  |
| 53 | 8.030 5729 | 8.042 1919 | 8.053 5081 | 8.064 5371 | 8.075 2929 | 8.085 7888 | 7  |
| 54 | 8.030 7692 | 8.042 3829 | 8.053 6943 | 8.064 7185 | 8.075 4699 | 8.085 9616 | 6  |
| 55 | 8.030 9653 | 8.042 5739 | 8.053 8803 | 8.064 8999 | 8.075 6469 | 8.086 1344 | 5  |
| 56 | 8.031 1613 | 8.042 7648 | 8.054 0663 | 8.065 0812 | 8.075 8238 | 8.086 3070 | 4  |
| 57 | 8.031 3573 | 8.042 9555 | 8.054 2522 | 8.065 2625 | 8.076 0006 | 8.086 4796 | 3  |
| 58 | 8.031 5531 | 8.043 1462 | 8.054 4380 | 8.065 4436 | 8.076 1773 | 8.086 6522 | 2  |
| 59 | 8.031 7489 | 8.043 3369 | 8.054 6237 | 8.065 6247 | 8.076 3540 | 8.086 8246 | 1  |
| 60 | 8.031 9446 | 8.043 5274 | 8.054 8094 | 8.065 8057 | 8.076 5306 | 8.086 9970 | 0  |
| "  | 28'        | 22'        | 21'        | 20'        | 19'        | 18'        | "  |



| "  | 42'        | 43'        | 44'        | 45'        | 46'        | 47'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.086 9646 | 8.097 1812 | 8.107 1669 | 8.116 9264 | 8.125 4711 | 8.133 8153 | 60 |
| 1  | 8.087 1369 | 8.097 3515 | 8.107 3314 | 8.117 1812 | 8.126 6281 | 8.135 1644 | 59 |
| 2  | 8.087 3091 | 8.097 5198 | 8.107 4958 | 8.117 3298 | 8.126 7856 | 8.135 3283 | 58 |
| 3  | 8.087 4813 | 8.097 6879 | 8.107 6601 | 8.117 4815 | 8.127 9435 | 8.136 4922 | 57 |
| 4  | 8.087 6534 | 8.097 8560 | 8.107 8144 | 8.117 6391 | 8.128 1022 | 8.136 6561 | 56 |
| 5  | 8.087 8254 | 8.098 0240 | 8.107 9886 | 8.117 7927 | 8.128 2609 | 8.136 8200 | 55 |
| 6  | 8.087 9974 | 8.098 1920 | 8.108 1548 | 8.117 9502 | 8.128 4196 | 8.136 9839 | 54 |
| 7  | 8.088 1692 | 8.098 3399 | 8.108 3169 | 8.118 1097 | 8.128 5783 | 8.137 1478 | 53 |
| 8  | 8.088 3411 | 8.098 5277 | 8.108 4857 | 8.118 2611 | 8.128 7369 | 8.137 3065 | 52 |
| 9  | 8.088 5128 | 8.098 6955 | 8.108 6449 | 8.118 4125 | 8.128 8956 | 8.137 4652 | 51 |
| 10 | 8.088 6845 | 8.098 8632 | 8.108 8088 | 8.118 5639 | 8.129 0542 | 8.137 6239 | 50 |
| 11 | 8.088 8561 | 8.099 0319 | 8.108 9726 | 8.118 7153 | 8.129 2129 | 8.137 7826 | 49 |
| 12 | 8.089 0277 | 8.099 1984 | 8.109 1464 | 8.118 8667 | 8.129 3715 | 8.137 9413 | 48 |
| 13 | 8.089 1991 | 8.099 3659 | 8.109 3001 | 8.119 0181 | 8.129 5302 | 8.138 1000 | 47 |
| 14 | 8.089 3706 | 8.099 5334 | 8.109 4619 | 8.119 1722 | 8.129 6888 | 8.138 2587 | 46 |
| 15 | 8.089 5419 | 8.099 7008 | 8.109 6274 | 8.119 3263 | 8.129 8475 | 8.138 4174 | 45 |
| 16 | 8.089 7132 | 8.099 8681 | 8.109 7907 | 8.119 4804 | 8.129 1002 | 8.138 5761 | 44 |
| 17 | 8.089 8843 | 8.100 0353 | 8.109 9544 | 8.119 6345 | 8.129 2589 | 8.138 7348 | 43 |
| 18 | 8.090 0555 | 8.100 2028 | 8.110 1178 | 8.119 7886 | 8.129 4175 | 8.138 8935 | 42 |
| 19 | 8.090 2266 | 8.100 3697 | 8.110 2812 | 8.119 9427 | 8.129 5762 | 8.139 0522 | 41 |
| 20 | 8.090 3976 | 8.100 5367 | 8.110 4445 | 8.120 0968 | 8.129 7349 | 8.139 2109 | 40 |
| 21 | 8.090 5685 | 8.100 7037 | 8.110 6077 | 8.120 2509 | 8.129 8936 | 8.139 3696 | 39 |
| 22 | 8.090 7391 | 8.100 8706 | 8.110 7709 | 8.120 4050 | 8.129 1002 | 8.139 5283 | 38 |
| 23 | 8.090 9102 | 8.101 0375 | 8.110 9340 | 8.120 5591 | 8.129 2589 | 8.139 6870 | 37 |
| 24 | 8.091 0810 | 8.101 2043 | 8.111 0971 | 8.120 7132 | 8.129 4175 | 8.139 8457 | 36 |
| 25 | 8.091 2516 | 8.101 3710 | 8.111 2600 | 8.120 8673 | 8.129 5762 | 8.140 0044 | 35 |
| 26 | 8.091 4222 | 8.101 5377 | 8.111 4239 | 8.121 0214 | 8.129 7349 | 8.140 1631 | 34 |
| 27 | 8.091 5928 | 8.101 7043 | 8.111 5858 | 8.121 1754 | 8.129 8936 | 8.140 3218 | 33 |
| 28 | 8.091 7632 | 8.101 8709 | 8.111 7486 | 8.121 3295 | 8.129 1002 | 8.140 4805 | 32 |
| 29 | 8.091 9336 | 8.102 0374 | 8.111 9113 | 8.121 4836 | 8.129 2589 | 8.140 6392 | 31 |
| 30 | 8.092 1040 | 8.102 2038 | 8.112 0740 | 8.121 6377 | 8.129 4175 | 8.140 7979 | 30 |
| 31 | 8.092 2743 | 8.102 3701 | 8.112 2366 | 8.121 7918 | 8.129 5762 | 8.140 9566 | 29 |
| 32 | 8.092 4445 | 8.102 5364 | 8.112 3992 | 8.121 9459 | 8.129 7349 | 8.141 1153 | 28 |
| 33 | 8.092 6146 | 8.102 7027 | 8.112 5617 | 8.122 1000 | 8.129 8936 | 8.141 2740 | 27 |
| 34 | 8.092 7847 | 8.102 8688 | 8.112 7241 | 8.122 2541 | 8.129 1002 | 8.141 4327 | 26 |
| 35 | 8.092 9547 | 8.103 0349 | 8.112 8865 | 8.122 4082 | 8.129 2589 | 8.141 5914 | 25 |
| 36 | 8.093 1246 | 8.103 2010 | 8.113 0488 | 8.122 5623 | 8.129 4175 | 8.141 7501 | 24 |
| 37 | 8.093 2945 | 8.103 3669 | 8.113 2110 | 8.122 7164 | 8.129 5762 | 8.141 9088 | 23 |
| 38 | 8.093 4643 | 8.103 5328 | 8.113 3733 | 8.122 8705 | 8.129 7349 | 8.142 0675 | 22 |
| 39 | 8.093 6340 | 8.103 6987 | 8.113 5354 | 8.123 0246 | 8.129 8936 | 8.142 2262 | 21 |
| 40 | 8.093 8037 | 8.103 8645 | 8.113 6975 | 8.123 1787 | 8.129 1002 | 8.142 3849 | 20 |
| 41 | 8.093 9733 | 8.104 0303 | 8.113 8596 | 8.123 3328 | 8.129 2589 | 8.142 5436 | 19 |
| 42 | 8.094 1428 | 8.104 1959 | 8.114 0214 | 8.123 4869 | 8.129 4175 | 8.142 7023 | 18 |
| 43 | 8.094 3123 | 8.104 3615 | 8.114 1835 | 8.123 6410 | 8.129 5762 | 8.142 8610 | 17 |
| 44 | 8.094 4817 | 8.104 5270 | 8.114 3451 | 8.123 7951 | 8.129 7349 | 8.143 0197 | 16 |
| 45 | 8.094 6510 | 8.104 6925 | 8.114 5067 | 8.123 9492 | 8.129 8936 | 8.143 1784 | 15 |
| 46 | 8.094 8203 | 8.104 8579 | 8.114 6686 | 8.124 1033 | 8.129 1002 | 8.143 3371 | 14 |
| 47 | 8.094 9895 | 8.105 0232 | 8.114 8302 | 8.124 2574 | 8.129 2589 | 8.143 4958 | 13 |
| 48 | 8.095 1587 | 8.105 1885 | 8.114 9918 | 8.124 4115 | 8.129 4175 | 8.143 6545 | 12 |
| 49 | 8.095 3277 | 8.105 3537 | 8.115 1534 | 8.124 5656 | 8.129 5762 | 8.143 8132 | 11 |
| 50 | 8.095 4968 | 8.105 5188 | 8.115 3148 | 8.124 7197 | 8.129 7349 | 8.143 9719 | 10 |
| 51 | 8.095 6657 | 8.105 6839 | 8.115 4762 | 8.124 8738 | 8.129 8936 | 8.144 1306 | 9  |
| 52 | 8.095 8346 | 8.105 8490 | 8.115 6376 | 8.125 0279 | 8.129 1002 | 8.144 2893 | 8  |
| 53 | 8.096 0034 | 8.106 0139 | 8.115 7989 | 8.125 1820 | 8.129 2589 | 8.144 4480 | 7  |
| 54 | 8.096 1721 | 8.106 1788 | 8.115 9601 | 8.125 3361 | 8.129 4175 | 8.144 6067 | 6  |
| 55 | 8.096 3408 | 8.106 3437 | 8.116 1211 | 8.125 4902 | 8.129 5762 | 8.144 7654 | 5  |
| 56 | 8.096 5094 | 8.106 5085 | 8.116 2824 | 8.125 6443 | 8.129 7349 | 8.144 9241 | 4  |
| 57 | 8.096 6780 | 8.106 6732 | 8.116 4434 | 8.125 7984 | 8.129 8936 | 8.145 0828 | 3  |
| 58 | 8.096 8465 | 8.106 8378 | 8.116 6044 | 8.125 9525 | 8.129 1002 | 8.145 2415 | 2  |
| 59 | 8.097 0149 | 8.107 0024 | 8.116 7654 | 8.126 1066 | 8.129 2589 | 8.145 4002 | 1  |
| 60 | 8.097 1832 | 8.107 1669 | 8.116 9264 | 8.126 2710 | 8.129 4175 | 8.145 5589 | 0  |
| "  | 17'        | 18'        | 19'        | 14'        | 13'        | 12'        | "  |



| "  | 42'        | 43'        | 44'        | 45'        | 46'        | 47'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.086 9970 | 8.097 2172 | 8.107 2025 | 8.116 9634 | 8.126 5099 | 8.135 8510 | 60 |
| 1  | 8.087 1693 | 8.097 3855 | 8.107 3670 | 8.117 1243 | 8.126 6672 | 8.136 0050 | 59 |
| 2  | 8.087 3416 | 8.097 5538 | 8.107 5314 | 8.117 2851 | 8.126 8245 | 8.136 1590 | 58 |
| 3  | 8.087 5138 | 8.097 7220 | 8.107 6958 | 8.117 4458 | 8.126 9817 | 8.136 3129 | 57 |
| 4  | 8.087 6859 | 8.097 8901 | 8.107 8601 | 8.117 6064 | 8.127 1389 | 8.136 4667 | 56 |
| 5  | 8.087 8579 | 8.098 0582 | 8.108 0243 | 8.117 7670 | 8.127 2960 | 8.136 6205 | 55 |
| 6  | 8.088 0299 | 8.098 2261 | 8.108 1885 | 8.117 9276 | 8.127 4531 | 8.136 7742 | 54 |
| 7  | 8.088 2018 | 8.098 3941 | 8.108 3526 | 8.118 0881 | 8.127 6101 | 8.136 9279 | 53 |
| 8  | 8.088 3737 | 8.098 5619 | 8.108 5167 | 8.118 2485 | 8.127 7670 | 8.137 0815 | 52 |
| 9  | 8.088 5455 | 8.098 7297 | 8.108 6807 | 8.118 4088 | 8.127 9239 | 8.137 2350 | 51 |
| 10 | 8.088 7172 | 8.098 8975 | 8.108 8446 | 8.118 5691 | 8.128 0807 | 8.137 3886 | 50 |
| 11 | 8.088 8888 | 8.099 0651 | 8.109 0085 | 8.118 7294 | 8.128 2375 | 8.137 5420 | 49 |
| 12 | 8.089 0604 | 8.099 2327 | 8.109 1723 | 8.118 8896 | 8.128 3942 | 8.137 6954 | 48 |
| 13 | 8.089 2319 | 8.099 4003 | 8.109 3361 | 8.119 0497 | 8.128 5509 | 8.137 8488 | 47 |
| 14 | 8.089 4033 | 8.099 5677 | 8.109 4998 | 8.119 2098 | 8.128 7075 | 8.138 0020 | 46 |
| 15 | 8.089 5747 | 8.099 7351 | 8.109 6634 | 8.119 3698 | 8.128 8641 | 8.138 1553 | 45 |
| 16 | 8.089 7460 | 8.099 9025 | 8.109 8269 | 8.119 5297 | 8.129 0206 | 8.138 3085 | 44 |
| 17 | 8.089 9172 | 8.100 0698 | 8.109 9904 | 8.119 6896 | 8.129 1770 | 8.138 4616 | 43 |
| 18 | 8.090 0884 | 8.100 2370 | 8.110 1539 | 8.119 8495 | 8.129 3334 | 8.138 6147 | 42 |
| 19 | 8.090 2595 | 8.100 4041 | 8.110 3173 | 8.120 0092 | 8.129 4897 | 8.138 7677 | 41 |
| 20 | 8.090 4305 | 8.100 5712 | 8.110 4806 | 8.120 1689 | 8.129 6460 | 8.138 9207 | 40 |
| 21 | 8.090 6015 | 8.100 7382 | 8.110 6438 | 8.120 3286 | 8.129 8022 | 8.139 0736 | 39 |
| 22 | 8.090 7724 | 8.100 9052 | 8.110 8070 | 8.120 4882 | 8.129 9583 | 8.139 2264 | 38 |
| 23 | 8.090 9432 | 8.101 0721 | 8.110 9702 | 8.120 6477 | 8.130 1144 | 8.139 3792 | 37 |
| 24 | 8.091 1140 | 8.101 2389 | 8.111 1332 | 8.120 8072 | 8.130 2705 | 8.139 5320 | 36 |
| 25 | 8.091 2847 | 8.101 4057 | 8.111 2962 | 8.120 9666 | 8.130 4265 | 8.139 6847 | 35 |
| 26 | 8.091 4553 | 8.101 5724 | 8.111 4592 | 8.121 1260 | 8.130 5824 | 8.139 8373 | 34 |
| 27 | 8.091 6259 | 8.101 7390 | 8.111 6221 | 8.121 2853 | 8.130 7383 | 8.139 9899 | 33 |
| 28 | 8.091 7964 | 8.101 9056 | 8.111 7849 | 8.121 4446 | 8.130 8941 | 8.140 1425 | 32 |
| 29 | 8.091 9668 | 8.101 9721 | 8.111 9477 | 8.121 6037 | 8.131 0498 | 8.140 2949 | 31 |
| 30 | 8.092 1372 | 8.102 2386 | 8.112 1104 | 8.121 7629 | 8.131 2056 | 8.140 4474 | 30 |
| 31 | 8.092 3075 | 8.102 4049 | 8.112 2730 | 8.121 9219 | 8.131 3612 | 8.140 5997 | 29 |
| 32 | 8.092 4777 | 8.102 5713 | 8.112 4356 | 8.122 0810 | 8.131 5168 | 8.140 7521 | 28 |
| 33 | 8.092 6479 | 8.102 7375 | 8.112 5981 | 8.122 2399 | 8.131 6723 | 8.140 9043 | 27 |
| 34 | 8.092 8180 | 8.102 9037 | 8.112 7606 | 8.122 3988 | 8.131 8278 | 8.141 0566 | 26 |
| 35 | 8.092 9880 | 8.103 0698 | 8.112 9230 | 8.122 5577 | 8.131 9833 | 8.141 2087 | 25 |
| 36 | 8.093 1579 | 8.103 2359 | 8.113 0853 | 8.122 7164 | 8.132 1386 | 8.141 3608 | 24 |
| 37 | 8.093 3278 | 8.103 4019 | 8.113 2476 | 8.122 8752 | 8.132 2940 | 8.141 5129 | 23 |
| 38 | 8.093 4977 | 8.103 5678 | 8.113 4098 | 8.123 0338 | 8.132 4492 | 8.141 6649 | 22 |
| 39 | 8.093 6674 | 8.103 7337 | 8.113 5720 | 8.123 1924 | 8.132 6044 | 8.141 8168 | 21 |
| 40 | 8.093 8371 | 8.103 8995 | 8.113 7341 | 8.123 3510 | 8.132 7596 | 8.141 9687 | 20 |
| 41 | 8.094 0068 | 8.104 0653 | 8.113 8961 | 8.123 5095 | 8.132 9147 | 8.142 1206 | 19 |
| 42 | 8.094 1763 | 8.104 2309 | 8.114 0581 | 8.123 6679 | 8.133 0697 | 8.142 2724 | 18 |
| 43 | 8.094 3458 | 8.104 3966 | 8.114 2200 | 8.123 8263 | 8.133 2247 | 8.142 4241 | 17 |
| 44 | 8.094 5153 | 8.104 5621 | 8.114 3819 | 8.123 9846 | 8.133 3796 | 8.142 5758 | 16 |
| 45 | 8.094 6846 | 8.104 7276 | 8.114 5437 | 8.124 1429 | 8.133 5345 | 8.142 7274 | 15 |
| 46 | 8.094 8539 | 8.104 8931 | 8.114 7054 | 8.124 3011 | 8.133 6893 | 8.142 8790 | 14 |
| 47 | 8.095 0232 | 8.105 0584 | 8.114 8671 | 8.124 4592 | 8.133 8441 | 8.143 0305 | 13 |
| 48 | 8.095 1923 | 8.105 2237 | 8.115 0287 | 8.124 6173 | 8.133 9988 | 8.143 1820 | 12 |
| 49 | 8.095 3614 | 8.105 3890 | 8.115 1903 | 8.124 7753 | 8.134 1535 | 8.143 3334 | 11 |
| 50 | 8.095 5305 | 8.105 5542 | 8.115 3518 | 8.124 9333 | 8.134 3081 | 8.143 4848 | 10 |
| 51 | 8.095 6994 | 8.105 7193 | 8.115 5132 | 8.125 0912 | 8.134 4626 | 8.143 6361 | 9  |
| 52 | 8.095 8683 | 8.105 8843 | 8.115 6746 | 8.125 2491 | 8.134 6171 | 8.143 7874 | 8  |
| 53 | 8.096 0372 | 8.106 0493 | 8.115 8359 | 8.125 4069 | 8.134 7715 | 8.143 9386 | 7  |
| 54 | 8.096 2060 | 8.106 2142 | 8.115 9972 | 8.125 5646 | 8.134 9259 | 8.144 0897 | 6  |
| 55 | 8.096 3747 | 8.106 3791 | 8.116 1584 | 8.125 7223 | 8.135 0802 | 8.144 2408 | 5  |
| 56 | 8.096 5433 | 8.106 5439 | 8.116 3195 | 8.125 8799 | 8.135 2345 | 8.144 3919 | 4  |
| 57 | 8.096 7119 | 8.106 7087 | 8.116 4806 | 8.126 0375 | 8.135 3887 | 8.144 5429 | 3  |
| 58 | 8.096 8804 | 8.106 8733 | 8.116 6416 | 8.126 1950 | 8.135 5429 | 8.144 6938 | 2  |
| 59 | 8.097 0488 | 8.107 0380 | 8.116 8025 | 8.126 3525 | 8.135 6970 | 8.144 8447 | 1  |
| 60 | 8.097 2172 | 8.107 2025 | 8.116 9634 | 8.126 5099 | 8.135 8510 | 8.144 9956 | 0  |
| "  | 17'        | 16'        | 15'        | 14'        | 13'        | 12'        | "  |



| "  | 48'        | 49'        | 50'        | 51'        | 52'        | 53'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.144 9532 | 8.153 9075 | 8.162 6808 | 8.171 2804 | 8.179 7129 | 8.187 9848 | 60 |
| 1  | 8.145 1040 | 8.154 0552 | 8.162 8255 | 8.171 4223 | 8.179 8521 | 8.188 1213 | 59 |
| 2  | 8.145 2547 | 8.154 2028 | 8.162 9702 | 8.171 5641 | 8.179 9912 | 8.188 2578 | 58 |
| 3  | 8.145 4054 | 8.154 3504 | 8.163 1149 | 8.171 7059 | 8.180 1303 | 8.188 3943 | 57 |
| 4  | 8.145 5560 | 8.154 4979 | 8.163 2594 | 8.171 8477 | 8.180 2693 | 8.188 5307 | 56 |
| 5  | 8.145 7065 | 8.154 6454 | 8.163 4040 | 8.171 9894 | 8.180 4083 | 8.188 6670 | 55 |
| 6  | 8.145 8570 | 8.154 7928 | 8.163 5485 | 8.172 1310 | 8.180 5472 | 8.188 8034 | 54 |
| 7  | 8.146 0075 | 8.154 9402 | 8.163 6929 | 8.172 2726 | 8.180 6861 | 8.188 9397 | 53 |
| 8  | 8.146 1579 | 8.155 0876 | 8.163 8373 | 8.172 4142 | 8.180 8250 | 8.189 0759 | 52 |
| 9  | 8.146 3082 | 8.155 2348 | 8.163 9817 | 8.172 5557 | 8.180 9638 | 8.189 2121 | 51 |
| 10 | 8.146 4585 | 8.155 3821 | 8.164 1259 | 8.172 6972 | 8.181 1025 | 8.189 3482 | 50 |
| 11 | 8.146 6087 | 8.155 5293 | 8.164 2702 | 8.172 8386 | 8.181 2413 | 8.189 4843 | 49 |
| 12 | 8.146 7589 | 8.155 6764 | 8.164 4144 | 8.172 9800 | 8.181 3799 | 8.189 6204 | 48 |
| 13 | 8.146 9091 | 8.155 8235 | 8.164 5586 | 8.173 1214 | 8.181 5186 | 8.189 7564 | 47 |
| 14 | 8.147 0591 | 8.155 9705 | 8.164 7027 | 8.173 2627 | 8.181 6571 | 8.189 8924 | 46 |
| 15 | 8.147 2092 | 8.156 1175 | 8.164 8467 | 8.173 4039 | 8.181 7957 | 8.190 0284 | 45 |
| 16 | 8.147 3592 | 8.156 2644 | 8.164 9907 | 8.173 5451 | 8.181 9342 | 8.190 1643 | 44 |
| 17 | 8.147 5091 | 8.156 4113 | 8.165 1347 | 8.173 6863 | 8.182 0726 | 8.190 3001 | 43 |
| 18 | 8.147 6590 | 8.156 5582 | 8.165 2786 | 8.173 8274 | 8.182 2111 | 8.190 4359 | 42 |
| 19 | 8.147 8088 | 8.156 7049 | 8.165 4225 | 8.173 9684 | 8.182 3494 | 8.190 5717 | 41 |
| 20 | 8.147 9586 | 8.156 8517 | 8.165 5663 | 8.174 1094 | 8.182 4877 | 8.190 7074 | 40 |
| 21 | 8.148 1083 | 8.156 9984 | 8.165 7101 | 8.174 2504 | 8.182 6260 | 8.190 8431 | 39 |
| 22 | 8.148 2579 | 8.157 1450 | 8.165 8538 | 8.174 3913 | 8.182 7643 | 8.190 9788 | 38 |
| 23 | 8.148 4076 | 8.157 2916 | 8.165 9975 | 8.174 5322 | 8.182 9024 | 8.191 1144 | 37 |
| 24 | 8.148 5571 | 8.157 4381 | 8.166 1411 | 8.174 6731 | 8.183 0406 | 8.191 2499 | 36 |
| 25 | 8.148 7066 | 8.157 5846 | 8.166 2847 | 8.174 8138 | 8.183 1787 | 8.191 3854 | 35 |
| 26 | 8.148 8561 | 8.157 7310 | 8.166 4282 | 8.174 9546 | 8.183 3167 | 8.191 5209 | 34 |
| 27 | 8.149 0055 | 8.157 8774 | 8.166 5717 | 8.175 0953 | 8.183 4548 | 8.191 6563 | 33 |
| 28 | 8.149 1549 | 8.158 0238 | 8.166 7151 | 8.175 2359 | 8.183 5927 | 8.191 7917 | 32 |
| 29 | 8.149 3042 | 8.158 1701 | 8.166 8585 | 8.175 3765 | 8.183 7307 | 8.191 9271 | 31 |
| 30 | 8.149 4534 | 8.158 3163 | 8.167 0019 | 8.175 5171 | 8.183 8685 | 8.192 0624 | 30 |
| 31 | 8.149 6027 | 8.158 4625 | 8.167 1452 | 8.175 6576 | 8.184 0064 | 8.192 1976 | 29 |
| 32 | 8.149 7518 | 8.158 6086 | 8.167 2884 | 8.175 7981 | 8.184 1442 | 8.192 3329 | 28 |
| 33 | 8.149 9009 | 8.158 7547 | 8.167 4316 | 8.175 9385 | 8.184 2819 | 8.192 4680 | 27 |
| 34 | 8.150 0500 | 8.158 9008 | 8.167 5748 | 8.176 0789 | 8.184 4196 | 8.192 6032 | 26 |
| 35 | 8.150 1990 | 8.159 0468 | 8.167 7179 | 8.176 2192 | 8.184 5573 | 8.192 7383 | 25 |
| 36 | 8.150 3479 | 8.159 1927 | 8.167 8610 | 8.176 3595 | 8.184 6949 | 8.192 8733 | 24 |
| 37 | 8.150 4968 | 8.159 3386 | 8.168 0040 | 8.176 4998 | 8.184 8325 | 8.193 0083 | 23 |
| 38 | 8.150 6457 | 8.159 4845 | 8.168 1469 | 8.176 6400 | 8.184 9700 | 8.193 1433 | 22 |
| 39 | 8.150 7945 | 8.159 6303 | 8.168 2899 | 8.176 7801 | 8.185 1075 | 8.193 2782 | 21 |
| 40 | 8.150 9432 | 8.159 7760 | 8.168 4327 | 8.176 9202 | 8.185 2450 | 8.193 4131 | 20 |
| 41 | 8.151 0919 | 8.159 9217 | 8.168 5756 | 8.177 0603 | 8.185 3824 | 8.193 5479 | 19 |
| 42 | 8.151 2406 | 8.160 0674 | 8.168 7183 | 8.177 2003 | 8.185 5197 | 8.193 6827 | 18 |
| 43 | 8.151 3891 | 8.160 2130 | 8.168 8611 | 8.177 3403 | 8.185 6570 | 8.193 8175 | 17 |
| 44 | 8.151 5377 | 8.160 3585 | 8.169 0038 | 8.177 4802 | 8.185 7943 | 8.193 9522 | 16 |
| 45 | 8.151 6862 | 8.160 5040 | 8.169 1464 | 8.177 6201 | 8.185 9315 | 8.194 0869 | 15 |
| 46 | 8.151 8346 | 8.160 6495 | 8.169 2890 | 8.177 7599 | 8.186 0687 | 8.194 2215 | 14 |
| 47 | 8.151 9830 | 8.160 7949 | 8.169 4315 | 8.177 8997 | 8.186 2059 | 8.194 3561 | 13 |
| 48 | 8.152 1314 | 8.160 9403 | 8.169 5740 | 8.178 0394 | 8.186 3430 | 8.194 4907 | 12 |
| 49 | 8.152 2796 | 8.161 0856 | 8.169 7165 | 8.178 1791 | 8.186 4800 | 8.194 6252 | 11 |
| 50 | 8.152 4279 | 8.161 2308 | 8.169 8589 | 8.178 3188 | 8.186 6170 | 8.194 7596 | 10 |
| 51 | 8.152 5761 | 8.161 3761 | 8.170 0012 | 8.178 4584 | 8.186 7540 | 8.194 8941 | 9  |
| 52 | 8.152 7242 | 8.161 5212 | 8.170 1435 | 8.178 5980 | 8.186 8909 | 8.195 0284 | 8  |
| 53 | 8.152 8723 | 8.161 6663 | 8.170 2858 | 8.178 7375 | 8.187 0278 | 8.195 1628 | 7  |
| 54 | 8.153 0203 | 8.161 8114 | 8.170 4280 | 8.178 8770 | 8.187 1646 | 8.195 2971 | 6  |
| 55 | 8.153 1683 | 8.161 9564 | 8.170 5702 | 8.179 0164 | 8.187 3014 | 8.195 4313 | 5  |
| 56 | 8.153 3163 | 8.162 1014 | 8.170 7123 | 8.179 1558 | 8.187 4382 | 8.195 5656 | 4  |
| 57 | 8.153 4641 | 8.162 2463 | 8.170 8544 | 8.179 2951 | 8.187 5749 | 8.195 6997 | 3  |
| 58 | 8.153 6120 | 8.162 3912 | 8.170 9964 | 8.179 4344 | 8.187 7116 | 8.195 8339 | 2  |
| 59 | 8.153 7598 | 8.162 5360 | 8.171 1384 | 8.179 5737 | 8.187 8482 | 8.195 9680 | 1  |
| 60 | 8.153 9075 | 8.162 6808 | 8.171 2804 | 8.179 7129 | 8.187 9848 | 8.196 1020 | 0  |
| "  | 11'        | 10'        | 9'         | 8'         | 7'         | 6'         | "  |



| "  | 48'        | 49'        | 50'        | 51'        | 52'        | 53'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.144 9956 | 8.153 9516 | 8.162 7267 | 8.171 3282 | 8.179 7626 | 8.188 0364 | 60 |
| 1  | 8.145 1464 | 8.154 0993 | 8.162 8715 | 8.171 4701 | 8.179 9018 | 8.188 1730 | 59 |
| 2  | 8.145 2971 | 8.154 2470 | 8.163 0162 | 8.171 6120 | 8.180 0409 | 8.188 3095 | 58 |
| 3  | 8.145 4478 | 8.154 3946 | 8.163 1609 | 8.171 7538 | 8.180 1800 | 8.188 4460 | 57 |
| 4  | 8.145 5984 | 8.154 5422 | 8.163 3055 | 8.171 8956 | 8.180 3191 | 8.188 5824 | 56 |
| 5  | 8.145 7490 | 8.154 6897 | 8.163 4501 | 8.172 0373 | 8.180 4581 | 8.188 7188 | 55 |
| 6  | 8.145 8995 | 8.154 8371 | 8.163 5946 | 8.172 1790 | 8.180 5971 | 8.188 8552 | 54 |
| 7  | 8.146 0500 | 8.154 9846 | 8.163 7391 | 8.172 3207 | 8.180 7360 | 8.188 9915 | 53 |
| 8  | 8.146 2004 | 8.155 1319 | 8.163 8835 | 8.172 4623 | 8.180 8749 | 8.189 1278 | 52 |
| 9  | 8.146 3508 | 8.155 2792 | 8.164 0279 | 8.172 6038 | 8.181 0137 | 8.189 2640 | 51 |
| 10 | 8.146 5011 | 8.155 4265 | 8.164 1722 | 8.172 7453 | 8.181 1525 | 8.189 4002 | 50 |
| 11 | 8.146 6514 | 8.155 5737 | 8.164 3165 | 8.172 8868 | 8.181 2913 | 8.189 5363 | 49 |
| 12 | 8.146 8016 | 8.155 7209 | 8.164 4607 | 8.173 0282 | 8.181 4300 | 8.189 6724 | 48 |
| 13 | 8.146 9518 | 8.155 8680 | 8.164 6049 | 8.173 1696 | 8.181 5687 | 8.189 8085 | 47 |
| 14 | 8.147 1019 | 8.156 0151 | 8.164 7490 | 8.173 3109 | 8.181 7073 | 8.189 9445 | 46 |
| 15 | 8.147 2520 | 8.156 1621 | 8.164 8931 | 8.173 4522 | 8.181 8459 | 8.190 0805 | 45 |
| 16 | 8.147 4020 | 8.156 3090 | 8.165 0372 | 8.173 5934 | 8.181 9844 | 8.190 2164 | 44 |
| 17 | 8.147 5519 | 8.156 4559 | 8.165 1812 | 8.173 7346 | 8.182 1229 | 8.190 3523 | 43 |
| 18 | 8.147 7018 | 8.156 6028 | 8.165 3251 | 8.173 8757 | 8.182 2613 | 8.190 4881 | 42 |
| 19 | 8.147 8517 | 8.156 7496 | 8.165 4690 | 8.174 0168 | 8.182 3997 | 8.190 6239 | 41 |
| 20 | 8.148 0015 | 8.156 8964 | 8.165 6128 | 8.174 1579 | 8.182 5381 | 8.190 7597 | 40 |
| 21 | 8.148 1512 | 8.157 0431 | 8.165 7566 | 8.174 2989 | 8.182 6764 | 8.190 8954 | 39 |
| 22 | 8.148 3009 | 8.157 1898 | 8.165 9004 | 8.174 4398 | 8.182 8146 | 8.191 0311 | 38 |
| 23 | 8.148 4506 | 8.157 3364 | 8.166 0441 | 8.174 5807 | 8.182 9529 | 8.191 1667 | 37 |
| 24 | 8.148 6002 | 8.157 4830 | 8.166 1878 | 8.174 7216 | 8.183 0910 | 8.191 3023 | 36 |
| 25 | 8.148 7497 | 8.157 6295 | 8.166 3314 | 8.174 8624 | 8.183 2292 | 8.191 4379 | 35 |
| 26 | 8.148 8992 | 8.157 7759 | 8.166 4749 | 8.175 0032 | 8.183 3673 | 8.191 5734 | 34 |
| 27 | 8.149 0487 | 8.157 9224 | 8.166 6185 | 8.175 1439 | 8.183 5053 | 8.191 7088 | 33 |
| 28 | 8.149 1980 | 8.158 0687 | 8.166 7619 | 8.175 2846 | 8.183 6433 | 8.191 8442 | 32 |
| 29 | 8.149 3474 | 8.158 2151 | 8.166 9054 | 8.175 4252 | 8.183 7813 | 8.191 9796 | 31 |
| 30 | 8.149 4967 | 8.158 3613 | 8.167 0487 | 8.175 5658 | 8.183 9192 | 8.192 1150 | 30 |
| 31 | 8.149 6459 | 8.158 5076 | 8.167 1921 | 8.175 7064 | 8.184 0571 | 8.192 2503 | 29 |
| 32 | 8.149 7951 | 8.158 6537 | 8.167 3353 | 8.175 8469 | 8.184 1949 | 8.192 3855 | 28 |
| 33 | 8.149 9442 | 8.158 7999 | 8.167 4786 | 8.175 9873 | 8.184 3327 | 8.192 5207 | 27 |
| 34 | 8.150 0933 | 8.158 9459 | 8.167 6218 | 8.176 1278 | 8.184 4704 | 8.192 6559 | 26 |
| 35 | 8.150 2423 | 8.159 0920 | 8.167 7649 | 8.176 2681 | 8.184 6081 | 8.192 7910 | 25 |
| 36 | 8.150 3913 | 8.159 2379 | 8.167 9080 | 8.176 4084 | 8.184 7458 | 8.192 9261 | 24 |
| 37 | 8.150 5402 | 8.159 3839 | 8.168 0510 | 8.176 5487 | 8.184 8834 | 8.193 0611 | 23 |
| 38 | 8.150 6891 | 8.159 5297 | 8.168 1940 | 8.176 6889 | 8.185 0209 | 8.193 1961 | 22 |
| 39 | 8.150 8380 | 8.159 6756 | 8.168 3370 | 8.176 8291 | 8.185 1585 | 8.193 3311 | 21 |
| 40 | 8.150 9867 | 8.159 8213 | 8.168 4799 | 8.176 9693 | 8.185 2959 | 8.193 4660 | 20 |
| 41 | 8.151 1355 | 8.159 9671 | 8.168 6228 | 8.177 1094 | 8.185 4334 | 8.193 6009 | 19 |
| 42 | 8.151 2841 | 8.160 1128 | 8.168 7656 | 8.177 2494 | 8.185 5708 | 8.193 7357 | 18 |
| 43 | 8.151 4328 | 8.160 2584 | 8.168 9083 | 8.177 3894 | 8.185 7081 | 8.193 8705 | 17 |
| 44 | 8.151 5813 | 8.160 4040 | 8.169 0510 | 8.177 5294 | 8.185 8454 | 8.194 0053 | 16 |
| 45 | 8.151 7299 | 8.160 5495 | 8.169 1937 | 8.177 6693 | 8.185 9827 | 8.194 1400 | 15 |
| 46 | 8.151 8783 | 8.160 6950 | 8.169 3363 | 8.177 8091 | 8.186 1199 | 8.194 2746 | 14 |
| 47 | 8.152 0267 | 8.160 8404 | 8.169 4789 | 8.177 9490 | 8.186 2571 | 8.194 4093 | 13 |
| 48 | 8.152 1751 | 8.160 9858 | 8.169 6214 | 8.178 0887 | 8.186 3942 | 8.194 5439 | 12 |
| 49 | 8.152 3234 | 8.161 1312 | 8.169 7639 | 8.178 2285 | 8.186 5313 | 8.194 6784 | 11 |
| 50 | 8.152 4717 | 8.161 2765 | 8.169 9064 | 8.178 3682 | 8.186 6683 | 8.194 8129 | 10 |
| 51 | 8.152 6199 | 8.161 4217 | 8.170 0487 | 8.178 5078 | 8.186 8053 | 8.194 9473 | 9  |
| 52 | 8.152 7681 | 8.161 5669 | 8.170 1911 | 8.178 6474 | 8.186 9423 | 8.195 0818 | 8  |
| 53 | 8.152 9162 | 8.161 7121 | 8.170 3334 | 8.178 7870 | 8.187 0792 | 8.195 2161 | 7  |
| 54 | 8.153 0643 | 8.161 8572 | 8.170 4756 | 8.178 9265 | 8.187 2161 | 8.195 3505 | 6  |
| 55 | 8.153 2123 | 8.162 0022 | 8.170 6178 | 8.179 0659 | 8.187 3529 | 8.195 4848 | 5  |
| 56 | 8.153 3603 | 8.162 1472 | 8.170 7600 | 8.179 2054 | 8.187 4897 | 8.195 6190 | 4  |
| 57 | 8.153 5082 | 8.162 2922 | 8.170 9021 | 8.179 3447 | 8.187 6264 | 8.195 7532 | 3  |
| 58 | 8.153 6560 | 8.162 4371 | 8.171 0442 | 8.179 4841 | 8.187 7631 | 8.195 8874 | 2  |
| 59 | 8.153 8038 | 8.162 5819 | 8.171 1862 | 8.179 6233 | 8.187 8998 | 8.196 0215 | 1  |
| 60 | 8.153 9516 | 8.162 7267 | 8.171 3282 | 8.179 7626 | 8.188 0364 | 8.196 1556 | 0  |
| "  | 11'        | 10'        | 9'         | 8'         | 7'         | 6'         | "  |



| "  | 51'        | 55'        | 59'        | 63'        | 67'        | 71'        | 75'        | "  |
|----|------------|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.196 1020 | 8.203 6701 | 8.211 8919 | 8.219 8881 | 8.227 8195 | 8.235 5904 | 8.243 5904 | 60 |
| 1  | 8.196 2360 | 8.203 8019 | 8.211 8943 | 8.219 8905 | 8.227 8219 | 8.235 5923 | 8.243 5923 | 59 |
| 2  | 8.196 3700 | 8.203 9318 | 8.211 8967 | 8.219 8929 | 8.227 8243 | 8.235 5942 | 8.243 5942 | 58 |
| 3  | 8.196 5040 | 8.204 0617 | 8.211 8991 | 8.219 8953 | 8.227 8267 | 8.235 5961 | 8.243 5961 | 57 |
| 4  | 8.196 6378 | 8.204 1916 | 8.211 9015 | 8.219 8977 | 8.227 8291 | 8.235 5980 | 8.243 5980 | 56 |
| 5  | 8.196 7717 | 8.204 3215 | 8.211 9039 | 8.219 9001 | 8.227 8315 | 8.235 6000 | 8.243 6000 | 55 |
| 6  | 8.196 9055 | 8.204 4514 | 8.211 9063 | 8.219 9025 | 8.227 8339 | 8.235 6019 | 8.243 6019 | 54 |
| 7  | 8.197 0392 | 8.204 5813 | 8.211 9087 | 8.219 9049 | 8.227 8363 | 8.235 6038 | 8.243 6038 | 53 |
| 8  | 8.197 1729 | 8.204 7112 | 8.211 9111 | 8.219 9073 | 8.227 8387 | 8.235 6057 | 8.243 6057 | 52 |
| 9  | 8.197 3066 | 8.204 8411 | 8.211 9135 | 8.219 9097 | 8.227 8411 | 8.235 6076 | 8.243 6076 | 51 |
| 10 | 8.197 4403 | 8.204 9710 | 8.211 9159 | 8.219 9121 | 8.227 8435 | 8.235 6095 | 8.243 6095 | 50 |
| 11 | 8.197 5739 | 8.205 1009 | 8.211 9183 | 8.219 9145 | 8.227 8459 | 8.235 6114 | 8.243 6114 | 49 |
| 12 | 8.197 7074 | 8.205 2308 | 8.211 9207 | 8.219 9169 | 8.227 8483 | 8.235 6133 | 8.243 6133 | 48 |
| 13 | 8.197 8409 | 8.205 3607 | 8.211 9231 | 8.219 9193 | 8.227 8507 | 8.235 6152 | 8.243 6152 | 47 |
| 14 | 8.197 9744 | 8.205 4906 | 8.211 9255 | 8.219 9217 | 8.227 8531 | 8.235 6171 | 8.243 6171 | 46 |
| 15 | 8.198 1078 | 8.205 6205 | 8.211 9279 | 8.219 9241 | 8.227 8555 | 8.235 6190 | 8.243 6190 | 45 |
| 16 | 8.198 2411 | 8.205 7504 | 8.211 9303 | 8.219 9265 | 8.227 8579 | 8.235 6209 | 8.243 6209 | 44 |
| 17 | 8.198 3746 | 8.205 8803 | 8.211 9327 | 8.219 9289 | 8.227 8603 | 8.235 6228 | 8.243 6228 | 43 |
| 18 | 8.198 5079 | 8.206 0102 | 8.211 9351 | 8.219 9313 | 8.227 8627 | 8.235 6247 | 8.243 6247 | 42 |
| 19 | 8.198 6412 | 8.206 1401 | 8.211 9375 | 8.219 9337 | 8.227 8651 | 8.235 6266 | 8.243 6266 | 41 |
| 20 | 8.198 7744 | 8.206 2700 | 8.211 9399 | 8.219 9361 | 8.227 8675 | 8.235 6285 | 8.243 6285 | 40 |
| 21 | 8.198 9076 | 8.206 4000 | 8.211 9423 | 8.219 9385 | 8.227 8699 | 8.235 6304 | 8.243 6304 | 39 |
| 22 | 8.199 0407 | 8.206 5299 | 8.211 9447 | 8.219 9409 | 8.227 8723 | 8.235 6323 | 8.243 6323 | 38 |
| 23 | 8.199 1738 | 8.206 6598 | 8.211 9471 | 8.219 9433 | 8.227 8747 | 8.235 6342 | 8.243 6342 | 37 |
| 24 | 8.199 3069 | 8.206 7897 | 8.211 9495 | 8.219 9457 | 8.227 8771 | 8.235 6361 | 8.243 6361 | 36 |
| 25 | 8.199 4399 | 8.206 9196 | 8.211 9519 | 8.219 9481 | 8.227 8795 | 8.235 6380 | 8.243 6380 | 35 |
| 26 | 8.199 5729 | 8.207 0495 | 8.211 9543 | 8.219 9505 | 8.227 8819 | 8.235 6399 | 8.243 6399 | 34 |
| 27 | 8.199 7058 | 8.207 1794 | 8.211 9567 | 8.219 9529 | 8.227 8843 | 8.235 6418 | 8.243 6418 | 33 |
| 28 | 8.199 8387 | 8.207 3093 | 8.211 9591 | 8.219 9553 | 8.227 8867 | 8.235 6437 | 8.243 6437 | 32 |
| 29 | 8.199 9716 | 8.207 4392 | 8.211 9615 | 8.219 9577 | 8.227 8891 | 8.235 6456 | 8.243 6456 | 31 |
| 30 | 8.200 1044 | 8.207 5691 | 8.211 9639 | 8.219 9601 | 8.227 8915 | 8.235 6475 | 8.243 6475 | 30 |
| 31 | 8.200 2372 | 8.207 6990 | 8.211 9663 | 8.219 9625 | 8.227 8939 | 8.235 6494 | 8.243 6494 | 29 |
| 32 | 8.200 3700 | 8.207 8289 | 8.211 9687 | 8.219 9649 | 8.227 8963 | 8.235 6513 | 8.243 6513 | 28 |
| 33 | 8.200 5026 | 8.207 9588 | 8.211 9711 | 8.219 9673 | 8.227 8987 | 8.235 6532 | 8.243 6532 | 27 |
| 34 | 8.200 6353 | 8.208 0887 | 8.211 9735 | 8.219 9697 | 8.227 9011 | 8.235 6551 | 8.243 6551 | 26 |
| 35 | 8.200 7679 | 8.208 2186 | 8.211 9759 | 8.219 9721 | 8.227 9035 | 8.235 6570 | 8.243 6570 | 25 |
| 36 | 8.200 9005 | 8.208 3485 | 8.211 9783 | 8.219 9745 | 8.227 9059 | 8.235 6589 | 8.243 6589 | 24 |
| 37 | 8.201 0330 | 8.208 4784 | 8.211 9807 | 8.219 9769 | 8.227 9083 | 8.235 6608 | 8.243 6608 | 23 |
| 38 | 8.201 1655 | 8.208 6083 | 8.211 9831 | 8.219 9793 | 8.227 9107 | 8.235 6627 | 8.243 6627 | 22 |
| 39 | 8.201 2980 | 8.208 7382 | 8.211 9855 | 8.219 9817 | 8.227 9131 | 8.235 6646 | 8.243 6646 | 21 |
| 40 | 8.201 4304 | 8.208 8681 | 8.211 9879 | 8.219 9841 | 8.227 9155 | 8.235 6665 | 8.243 6665 | 20 |
| 41 | 8.201 5628 | 8.208 9980 | 8.211 9903 | 8.219 9865 | 8.227 9179 | 8.235 6684 | 8.243 6684 | 19 |
| 42 | 8.201 6951 | 8.209 1279 | 8.211 9927 | 8.219 9889 | 8.227 9203 | 8.235 6703 | 8.243 6703 | 18 |
| 43 | 8.201 8274 | 8.209 2578 | 8.211 9951 | 8.219 9913 | 8.227 9227 | 8.235 6722 | 8.243 6722 | 17 |
| 44 | 8.201 9597 | 8.209 3877 | 8.211 9975 | 8.219 9937 | 8.227 9251 | 8.235 6741 | 8.243 6741 | 16 |
| 45 | 8.202 0919 | 8.209 5176 | 8.211 9999 | 8.219 9961 | 8.227 9275 | 8.235 6760 | 8.243 6760 | 15 |
| 46 | 8.202 2241 | 8.209 6475 | 8.212 0023 | 8.220 0005 | 8.227 9299 | 8.235 6779 | 8.243 6779 | 14 |
| 47 | 8.202 3562 | 8.209 7774 | 8.212 0047 | 8.220 0029 | 8.227 9323 | 8.235 6798 | 8.243 6798 | 13 |
| 48 | 8.202 4883 | 8.209 9073 | 8.212 0071 | 8.220 0053 | 8.227 9347 | 8.235 6817 | 8.243 6817 | 12 |
| 49 | 8.202 6203 | 8.210 0372 | 8.212 0095 | 8.220 0077 | 8.227 9371 | 8.235 6836 | 8.243 6836 | 11 |
| 50 | 8.202 7523 | 8.210 1671 | 8.212 0119 | 8.220 0101 | 8.227 9395 | 8.235 6855 | 8.243 6855 | 10 |
| 51 | 8.202 8843 | 8.210 2970 | 8.212 0143 | 8.220 0125 | 8.227 9419 | 8.235 6874 | 8.243 6874 | 9  |
| 52 | 8.203 0163 | 8.210 4269 | 8.212 0167 | 8.220 0149 | 8.227 9443 | 8.235 6893 | 8.243 6893 | 8  |
| 53 | 8.203 1481 | 8.210 5568 | 8.212 0191 | 8.220 0173 | 8.227 9467 | 8.235 6912 | 8.243 6912 | 7  |
| 54 | 8.203 2800 | 8.210 6867 | 8.212 0215 | 8.220 0197 | 8.227 9491 | 8.235 6931 | 8.243 6931 | 6  |
| 55 | 8.203 4118 | 8.210 8166 | 8.212 0239 | 8.220 0221 | 8.227 9515 | 8.235 6950 | 8.243 6950 | 5  |
| 56 | 8.203 5436 | 8.210 9465 | 8.212 0263 | 8.220 0245 | 8.227 9539 | 8.235 6969 | 8.243 6969 | 4  |
| 57 | 8.203 6753 | 8.211 0764 | 8.212 0287 | 8.220 0269 | 8.227 9563 | 8.235 6988 | 8.243 6988 | 3  |
| 58 | 8.203 8070 | 8.211 2063 | 8.212 0311 | 8.220 0293 | 8.227 9587 | 8.235 7007 | 8.243 7007 | 2  |
| 59 | 8.203 9387 | 8.211 3362 | 8.212 0335 | 8.220 0317 | 8.227 9611 | 8.235 7026 | 8.243 7026 | 1  |
| 60 | 8.204 0703 | 8.211 4661 | 8.212 0359 | 8.220 0341 | 8.227 9635 | 8.235 7045 | 8.243 7045 | 0  |
| "  | 6'         | 4'         | 3'         | 2'         | 1'         | 0'         | "          |    |



| "  | 54'        | 55'        | 56'        | 57'        | 58'        | 59'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.196 1556 | 8.204 1259 | 8.211 9526 | 8.219 6408 | 8.227 1953 | 8.234 6208 | 60 |
| 1  | 8.196 2896 | 8.204 2575 | 8.212 0818 | 8.219 7678 | 8.227 3201 | 8.234 7435 | 59 |
| 2  | 8.196 4236 | 8.204 3890 | 8.212 2110 | 8.219 8947 | 8.227 4449 | 8.234 8661 | 58 |
| 3  | 8.196 5576 | 8.204 5206 | 8.212 3402 | 8.220 0216 | 8.227 5696 | 8.234 9887 | 57 |
| 4  | 8.196 6915 | 8.204 6521 | 8.212 4694 | 8.220 1485 | 8.227 6943 | 8.235 1113 | 56 |
| 5  | 8.196 8254 | 8.204 7835 | 8.212 5985 | 8.220 2754 | 8.227 8190 | 8.235 2339 | 55 |
| 6  | 8.196 9592 | 8.204 9149 | 8.212 7275 | 8.220 4022 | 8.227 9436 | 8.235 3564 | 54 |
| 7  | 8.197 0930 | 8.205 0463 | 8.212 8566 | 8.220 5289 | 8.228 0682 | 8.235 4789 | 53 |
| 8  | 8.197 2268 | 8.205 1776 | 8.212 9855 | 8.220 6557 | 8.228 1927 | 8.235 6013 | 52 |
| 9  | 8.197 3605 | 8.205 3089 | 8.213 1145 | 8.220 7824 | 8.228 3173 | 8.235 7237 | 51 |
| 10 | 8.197 4942 | 8.205 4401 | 8.213 2434 | 8.220 9090 | 8.228 4417 | 8.235 8461 | 50 |
| 11 | 8.197 6278 | 8.205 5714 | 8.213 3723 | 8.221 0356 | 8.228 5662 | 8.235 9684 | 49 |
| 12 | 8.197 7614 | 8.205 7025 | 8.213 5011 | 8.221 1622 | 8.228 6906 | 8.236 0908 | 48 |
| 13 | 8.197 8949 | 8.205 8337 | 8.213 6299 | 8.221 2888 | 8.228 8150 | 8.236 2130 | 47 |
| 14 | 8.198 0284 | 8.205 9647 | 8.213 7587 | 8.221 4153 | 8.228 9393 | 8.236 3353 | 46 |
| 15 | 8.198 1619 | 8.206 0958 | 8.213 8874 | 8.221 5418 | 8.229 0636 | 8.236 4575 | 45 |
| 16 | 8.198 2953 | 8.206 2268 | 8.214 0161 | 8.221 6682 | 8.229 1879 | 8.236 5796 | 44 |
| 17 | 8.198 4287 | 8.206 3578 | 8.214 1447 | 8.221 7946 | 8.229 3121 | 8.236 7018 | 43 |
| 18 | 8.198 5621 | 8.206 4887 | 8.214 2733 | 8.221 9210 | 8.229 4363 | 8.236 8239 | 42 |
| 19 | 8.198 6954 | 8.206 6196 | 8.214 4019 | 8.222 0473 | 8.229 5605 | 8.236 9460 | 41 |
| 20 | 8.198 8286 | 8.206 7505 | 8.214 5304 | 8.222 1736 | 8.229 6846 | 8.237 0680 | 40 |
| 21 | 8.198 9619 | 8.206 8813 | 8.214 6589 | 8.222 2998 | 8.229 8087 | 8.237 1900 | 39 |
| 22 | 8.199 0950 | 8.207 0120 | 8.214 7874 | 8.222 4260 | 8.229 9327 | 8.237 3120 | 38 |
| 23 | 8.199 2282 | 8.207 1428 | 8.214 9158 | 8.222 5522 | 8.230 0568 | 8.237 4339 | 37 |
| 24 | 8.199 3613 | 8.207 2735 | 8.215 0442 | 8.222 6784 | 8.230 1807 | 8.237 5558 | 36 |
| 25 | 8.199 4943 | 8.207 4041 | 8.215 1725 | 8.222 8045 | 8.230 3047 | 8.237 6776 | 35 |
| 26 | 8.199 6273 | 8.207 5348 | 8.215 3008 | 8.222 9305 | 8.230 4286 | 8.237 7995 | 34 |
| 27 | 8.199 7603 | 8.207 6653 | 8.215 4291 | 8.223 0566 | 8.230 5525 | 8.237 9213 | 33 |
| 28 | 8.199 8933 | 8.207 7959 | 8.215 5573 | 8.223 1826 | 8.230 6763 | 8.238 0430 | 32 |
| 29 | 8.200 0262 | 8.207 9264 | 8.215 6855 | 8.223 3085 | 8.230 8001 | 8.238 1648 | 31 |
| 30 | 8.200 1590 | 8.208 0568 | 8.215 8137 | 8.223 4345 | 8.230 9239 | 8.238 2865 | 30 |
| 31 | 8.200 2918 | 8.208 1873 | 8.215 9418 | 8.223 5604 | 8.231 0476 | 8.238 4081 | 29 |
| 32 | 8.200 4246 | 8.208 3176 | 8.216 0699 | 8.223 6862 | 8.231 1713 | 8.238 5297 | 28 |
| 33 | 8.200 5573 | 8.208 4480 | 8.216 1979 | 8.223 8120 | 8.231 2950 | 8.238 6513 | 27 |
| 34 | 8.200 6900 | 8.208 5783 | 8.216 3259 | 8.223 9378 | 8.231 4186 | 8.238 7729 | 26 |
| 35 | 8.200 8227 | 8.208 7086 | 8.216 4539 | 8.224 0635 | 8.231 5422 | 8.238 8944 | 25 |
| 36 | 8.200 9553 | 8.208 8388 | 8.216 5818 | 8.224 1892 | 8.231 6658 | 8.239 0159 | 24 |
| 37 | 8.201 0879 | 8.208 9690 | 8.216 7097 | 8.224 3149 | 8.231 7893 | 8.239 1373 | 23 |
| 38 | 8.201 2204 | 8.209 0991 | 8.216 8375 | 8.224 4405 | 8.231 9128 | 8.239 2588 | 22 |
| 39 | 8.201 3529 | 8.209 2292 | 8.216 9653 | 8.224 5661 | 8.232 0363 | 8.239 3802 | 21 |
| 40 | 8.201 4853 | 8.209 3593 | 8.217 0931 | 8.224 6917 | 8.232 1597 | 8.239 5015 | 20 |
| 41 | 8.201 6177 | 8.209 4893 | 8.217 2209 | 8.224 8172 | 8.232 2831 | 8.239 6228 | 19 |
| 42 | 8.201 7501 | 8.209 6193 | 8.217 3486 | 8.224 9427 | 8.232 4064 | 8.239 7441 | 18 |
| 43 | 8.201 8824 | 8.209 7493 | 8.217 4762 | 8.225 0682 | 8.232 5297 | 8.239 8654 | 17 |
| 44 | 8.202 0147 | 8.209 8792 | 8.217 6038 | 8.225 1936 | 8.232 6530 | 8.239 9866 | 16 |
| 45 | 8.202 1470 | 8.210 0091 | 8.217 7314 | 8.225 3190 | 8.232 7763 | 8.240 1078 | 15 |
| 46 | 8.202 2792 | 8.210 1389 | 8.217 8590 | 8.225 4443 | 8.232 8995 | 8.240 2289 | 14 |
| 47 | 8.202 4113 | 8.210 2687 | 8.217 9865 | 8.225 5696 | 8.233 0227 | 8.240 3500 | 13 |
| 48 | 8.202 5435 | 8.210 3985 | 8.218 1140 | 8.225 6949 | 8.233 1458 | 8.240 4711 | 12 |
| 49 | 8.202 6756 | 8.210 5282 | 8.218 2414 | 8.225 8201 | 8.233 2689 | 8.240 5922 | 11 |
| 50 | 8.202 8076 | 8.210 6579 | 8.218 3688 | 8.225 9453 | 8.233 3920 | 8.240 7132 | 10 |
| 51 | 8.202 9396 | 8.210 7875 | 8.218 4962 | 8.226 0705 | 8.233 5150 | 8.240 8342 | 9  |
| 52 | 8.203 0716 | 8.210 9171 | 8.218 6235 | 8.226 1956 | 8.233 6380 | 8.240 9551 | 8  |
| 53 | 8.203 2035 | 8.211 0467 | 8.218 7508 | 8.226 3207 | 8.233 7610 | 8.241 0760 | 7  |
| 54 | 8.203 3354 | 8.211 1762 | 8.218 8780 | 8.226 4457 | 8.233 8839 | 8.241 1969 | 6  |
| 55 | 8.203 4672 | 8.211 3057 | 8.219 0053 | 8.226 5708 | 8.234 0068 | 8.241 3177 | 5  |
| 56 | 8.203 5990 | 8.211 4351 | 8.219 1324 | 8.226 6957 | 8.234 1297 | 8.241 4386 | 4  |
| 57 | 8.203 7308 | 8.211 5646 | 8.219 2596 | 8.226 8207 | 8.234 2525 | 8.241 5593 | 3  |
| 58 | 8.203 8625 | 8.211 6939 | 8.219 3867 | 8.226 9456 | 8.234 3753 | 8.241 6801 | 2  |
| 59 | 8.203 9942 | 8.211 8233 | 8.219 5137 | 8.227 0705 | 8.234 4980 | 8.241 8008 | 1  |
| 60 | 8.204 1259 | 8.211 9526 | 8.219 6408 | 8.227 1953 | 8.234 6208 | 8.241 9215 | 0  |
| "  | 5'         | 4'         | 3'         | 2'         | 1'         | 0'         | "  |



| "  | 0'         | 1'         | 2'         | 3'         | 4'         | 5'         | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.241 8553 | 8.249 0332 | 8.256 0943 | 8.263 0424 | 8.269 8810 | 8.276 6136 | 60 |
| 1  | 8.241 9759 | 8.249 1518 | 8.256 2110 | 8.263 1572 | 8.269 9941 | 8.276 7249 | 59 |
| 2  | 8.242 0965 | 8.249 2704 | 8.256 3277 | 8.263 2721 | 8.270 1071 | 8.276 8362 | 58 |
| 3  | 8.242 2170 | 8.249 3890 | 8.256 4443 | 8.263 3869 | 8.270 2201 | 8.276 9475 | 57 |
| 4  | 8.242 3376 | 8.249 5075 | 8.256 5609 | 8.263 5016 | 8.270 3331 | 8.277 0587 | 56 |
| 5  | 8.242 4580 | 8.249 6260 | 8.256 6775 | 8.263 6164 | 8.270 4461 | 8.277 1700 | 55 |
| 6  | 8.242 5785 | 8.249 7445 | 8.256 7941 | 8.263 7311 | 8.270 5590 | 8.277 2811 | 54 |
| 7  | 8.242 6989 | 8.249 8629 | 8.256 9106 | 8.263 8458 | 8.270 6719 | 8.277 3923 | 53 |
| 8  | 8.242 8192 | 8.249 9813 | 8.257 0271 | 8.263 9604 | 8.270 7847 | 8.277 5034 | 52 |
| 9  | 8.242 9396 | 8.250 0997 | 8.257 1436 | 8.264 0750 | 8.270 8976 | 8.277 6145 | 51 |
| 10 | 8.243 0599 | 8.250 2180 | 8.257 2600 | 8.264 1896 | 8.271 0104 | 8.277 7256 | 50 |
| 11 | 8.243 1802 | 8.250 3363 | 8.257 3764 | 8.264 3042 | 8.271 1232 | 8.277 8367 | 49 |
| 12 | 8.243 3004 | 8.250 4546 | 8.257 4928 | 8.264 4187 | 8.271 2359 | 8.277 9477 | 48 |
| 13 | 8.243 4206 | 8.250 5728 | 8.257 6091 | 8.264 5332 | 8.271 3486 | 8.278 0587 | 47 |
| 14 | 8.243 5408 | 8.250 6911 | 8.257 7255 | 8.264 6477 | 8.271 4613 | 8.278 1696 | 46 |
| 15 | 8.243 6609 | 8.250 8092 | 8.257 8417 | 8.264 7621 | 8.271 5740 | 8.278 2806 | 45 |
| 16 | 8.243 7810 | 8.250 9274 | 8.257 9580 | 8.264 8766 | 8.271 6866 | 8.278 3915 | 44 |
| 17 | 8.243 9011 | 8.251 0455 | 8.258 0742 | 8.264 9909 | 8.271 7992 | 8.278 5023 | 43 |
| 18 | 8.244 0212 | 8.251 1636 | 8.258 1904 | 8.265 1053 | 8.271 9118 | 8.278 6132 | 42 |
| 19 | 8.244 1412 | 8.251 2816 | 8.258 3065 | 8.265 2196 | 8.272 0243 | 8.278 7240 | 41 |
| 20 | 8.244 2611 | 8.251 3996 | 8.258 4227 | 8.265 3339 | 8.272 1368 | 8.278 8348 | 40 |
| 21 | 8.244 3811 | 8.251 5176 | 8.258 5388 | 8.265 4482 | 8.272 2493 | 8.278 9456 | 39 |
| 22 | 8.244 5010 | 8.251 6356 | 8.258 6548 | 8.265 5624 | 8.272 3618 | 8.279 0563 | 38 |
| 23 | 8.244 6209 | 8.251 7535 | 8.258 7709 | 8.265 6766 | 8.272 4742 | 8.279 1670 | 37 |
| 24 | 8.244 7407 | 8.251 8714 | 8.258 8869 | 8.265 7908 | 8.272 5866 | 8.279 2777 | 36 |
| 25 | 8.244 8605 | 8.251 9893 | 8.259 0028 | 8.265 9049 | 8.272 6990 | 8.279 3883 | 35 |
| 26 | 8.244 9803 | 8.252 1071 | 8.259 1188 | 8.266 0190 | 8.272 8113 | 8.279 4989 | 34 |
| 27 | 8.245 1000 | 8.252 2249 | 8.259 2347 | 8.266 1331 | 8.272 9236 | 8.279 6095 | 33 |
| 28 | 8.245 2198 | 8.252 3426 | 8.259 3505 | 8.266 2471 | 8.273 0359 | 8.279 7201 | 32 |
| 29 | 8.245 3394 | 8.252 4604 | 8.259 4664 | 8.266 3612 | 8.273 1481 | 8.279 8306 | 31 |
| 30 | 8.245 4591 | 8.252 5781 | 8.259 5822 | 8.266 4751 | 8.273 2604 | 8.279 9411 | 30 |
| 31 | 8.245 5787 | 8.252 6957 | 8.259 6980 | 8.266 5891 | 8.273 3725 | 8.280 0516 | 29 |
| 32 | 8.245 6983 | 8.252 8134 | 8.259 8137 | 8.266 7030 | 8.273 4847 | 8.280 1621 | 28 |
| 33 | 8.245 8178 | 8.252 9310 | 8.259 9295 | 8.266 8169 | 8.273 5968 | 8.280 2725 | 27 |
| 34 | 8.245 9373 | 8.253 0485 | 8.260 0452 | 8.266 9308 | 8.273 7089 | 8.280 3829 | 26 |
| 35 | 8.246 0568 | 8.253 1661 | 8.260 1608 | 8.267 0446 | 8.273 8210 | 8.280 4933 | 25 |
| 36 | 8.246 1762 | 8.253 2836 | 8.260 2764 | 8.267 1585 | 8.273 9331 | 8.280 6036 | 24 |
| 37 | 8.246 2957 | 8.253 4011 | 8.260 3920 | 8.267 2722 | 8.274 0451 | 8.280 7139 | 23 |
| 38 | 8.246 4150 | 8.253 5185 | 8.260 5076 | 8.267 3860 | 8.274 1571 | 8.280 8242 | 22 |
| 39 | 8.246 5344 | 8.253 6359 | 8.260 6232 | 8.267 4997 | 8.274 2690 | 8.280 9345 | 21 |
| 40 | 8.246 6537 | 8.253 7533 | 8.260 7387 | 8.267 6134 | 8.274 3810 | 8.281 0447 | 20 |
| 41 | 8.246 7730 | 8.253 8706 | 8.260 8541 | 8.267 7271 | 8.274 4929 | 8.281 1549 | 19 |
| 42 | 8.246 8922 | 8.253 9880 | 8.260 9696 | 8.267 8407 | 8.274 6048 | 8.281 2650 | 18 |
| 43 | 8.247 0115 | 8.254 1052 | 8.261 0850 | 8.267 9543 | 8.274 7166 | 8.281 3752 | 17 |
| 44 | 8.247 1306 | 8.254 2225 | 8.261 2004 | 8.268 0679 | 8.274 8284 | 8.281 4853 | 16 |
| 45 | 8.247 2498 | 8.254 3397 | 8.261 3157 | 8.268 1814 | 8.274 9402 | 8.281 5954 | 15 |
| 46 | 8.247 3689 | 8.254 4569 | 8.261 4311 | 8.268 2949 | 8.275 0520 | 8.281 7055 | 14 |
| 47 | 8.247 4880 | 8.254 5741 | 8.261 5463 | 8.268 4084 | 8.275 1637 | 8.281 8155 | 13 |
| 48 | 8.247 6071 | 8.254 6912 | 8.261 6616 | 8.268 5219 | 8.275 2754 | 8.281 9255 | 12 |
| 49 | 8.247 7261 | 8.254 8083 | 8.261 7768 | 8.268 6353 | 8.275 3871 | 8.282 0355 | 11 |
| 50 | 8.247 8451 | 8.254 9254 | 8.261 8920 | 8.268 7487 | 8.275 4987 | 8.282 1454 | 10 |
| 51 | 8.247 9640 | 8.255 0424 | 8.262 0072 | 8.268 8620 | 8.275 6103 | 8.282 2553 | 9  |
| 52 | 8.248 0829 | 8.255 1594 | 8.262 1223 | 8.268 9754 | 8.275 7219 | 8.282 3652 | 8  |
| 53 | 8.248 2018 | 8.255 2764 | 8.262 2375 | 8.269 0887 | 8.275 8335 | 8.282 4751 | 7  |
| 54 | 8.248 3207 | 8.255 3933 | 8.262 3525 | 8.269 2020 | 8.275 9450 | 8.282 5849 | 6  |
| 55 | 8.248 4395 | 8.255 5102 | 8.262 4676 | 8.269 3152 | 8.276 0565 | 8.282 6947 | 5  |
| 56 | 8.248 5583 | 8.255 6271 | 8.262 5826 | 8.269 4284 | 8.276 1680 | 8.282 8045 | 4  |
| 57 | 8.248 6771 | 8.255 7439 | 8.262 6976 | 8.269 5416 | 8.276 2794 | 8.282 9143 | 3  |
| 58 | 8.248 7958 | 8.255 8607 | 8.262 8125 | 8.269 6548 | 8.276 3909 | 8.283 0240 | 2  |
| 59 | 8.248 9145 | 8.255 9775 | 8.262 9275 | 8.269 7679 | 8.276 5022 | 8.283 1337 | 1  |
| 60 | 8.249 0332 | 8.256 0943 | 8.263 0424 | 8.269 8810 | 8.276 6136 | 8.283 2434 | 0  |
| "  | 59'        | 58'        | 57'        | 56'        | 55'        | 54'        | "  |



| "  | 0'         | 1'         | 2'         | 3'         | 4'         | 5'         | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.241 9215 | 8.249 1015 | 8.256 1649 | 8.263 1153 | 8.269 9563 | 8.276 6912 | 60 |
| 1  | 8.242 0421 | 8.249 2202 | 8.256 2817 | 8.263 2302 | 8.270 0694 | 8.276 8026 | 59 |
| 2  | 8.242 1627 | 8.249 3388 | 8.256 3984 | 8.263 3451 | 8.270 1825 | 8.276 9139 | 58 |
| 3  | 8.242 2833 | 8.249 4574 | 8.256 5151 | 8.263 4599 | 8.270 2955 | 8.277 0253 | 57 |
| 4  | 8.242 4038 | 8.249 5760 | 8.256 6317 | 8.263 5747 | 8.270 4085 | 8.277 1365 | 56 |
| 5  | 8.242 5244 | 8.249 6946 | 8.256 7484 | 8.263 6895 | 8.270 5215 | 8.277 2478 | 55 |
| 6  | 8.242 6448 | 8.249 8131 | 8.256 8650 | 8.263 8043 | 8.270 6345 | 8.277 3590 | 54 |
| 7  | 8.242 7653 | 8.249 9315 | 8.256 9815 | 8.263 9190 | 8.270 7474 | 8.277 4702 | 53 |
| 8  | 8.242 8857 | 8.250 0500 | 8.257 0981 | 8.264 0337 | 8.270 8603 | 8.277 5814 | 52 |
| 9  | 8.243 0061 | 8.250 1684 | 8.257 2146 | 8.264 1483 | 8.270 9732 | 8.277 6925 | 51 |
| 10 | 8.243 1264 | 8.250 2868 | 8.257 3310 | 8.264 2630 | 8.271 0860 | 8.277 8036 | 50 |
| 11 | 8.243 2467 | 8.250 4051 | 8.257 4475 | 8.264 3776 | 8.271 1989 | 8.277 9147 | 49 |
| 12 | 8.243 3670 | 8.250 5234 | 8.257 5639 | 8.264 4921 | 8.271 3116 | 8.278 0258 | 48 |
| 13 | 8.243 4872 | 8.250 6417 | 8.257 6803 | 8.264 6067 | 8.271 4244 | 8.278 1368 | 47 |
| 14 | 8.243 6075 | 8.250 7600 | 8.257 7966 | 8.264 7212 | 8.271 5371 | 8.278 2478 | 46 |
| 15 | 8.243 7276 | 8.250 8782 | 8.257 9129 | 8.264 8357 | 8.271 6498 | 8.278 3588 | 45 |
| 16 | 8.243 8478 | 8.250 9964 | 8.258 0292 | 8.264 9501 | 8.271 7625 | 8.278 4697 | 44 |
| 17 | 8.243 9679 | 8.251 1145 | 8.258 1455 | 8.265 0645 | 8.271 8751 | 8.278 5806 | 43 |
| 18 | 8.244 0880 | 8.251 2326 | 8.258 2617 | 8.265 1789 | 8.271 9877 | 8.278 6915 | 42 |
| 19 | 8.244 2080 | 8.251 3507 | 8.258 3779 | 8.265 2933 | 8.272 1003 | 8.278 8024 | 41 |
| 20 | 8.244 3280 | 8.251 4688 | 8.258 4941 | 8.265 4076 | 8.272 2129 | 8.278 9132 | 40 |
| 21 | 8.244 4480 | 8.251 5868 | 8.258 6102 | 8.265 5219 | 8.272 3254 | 8.279 0240 | 39 |
| 22 | 8.244 5680 | 8.251 7048 | 8.258 7263 | 8.265 6362 | 8.272 4379 | 8.279 1348 | 38 |
| 23 | 8.244 6879 | 8.251 8227 | 8.258 8424 | 8.265 7504 | 8.272 5504 | 8.279 2455 | 37 |
| 24 | 8.244 8077 | 8.251 9407 | 8.258 9584 | 8.265 8646 | 8.272 6628 | 8.279 3563 | 36 |
| 25 | 8.244 9276 | 8.252 0586 | 8.259 0744 | 8.265 9788 | 8.272 7752 | 8.279 4670 | 35 |
| 26 | 8.245 0474 | 8.252 1764 | 8.259 1904 | 8.266 0929 | 8.272 8876 | 8.279 5776 | 34 |
| 27 | 8.245 1672 | 8.252 2943 | 8.259 3063 | 8.266 2071 | 8.272 9999 | 8.279 6882 | 33 |
| 28 | 8.245 2869 | 8.252 4121 | 8.259 4223 | 8.266 3212 | 8.273 1122 | 8.279 7988 | 32 |
| 29 | 8.245 4066 | 8.252 5298 | 8.259 5381 | 8.266 4352 | 8.273 2245 | 8.279 9094 | 31 |
| 30 | 8.245 5263 | 8.252 6476 | 8.259 6540 | 8.266 5492 | 8.273 3368 | 8.280 0200 | 30 |
| 31 | 8.245 6460 | 8.252 7653 | 8.259 7698 | 8.266 6632 | 8.273 4490 | 8.280 1305 | 29 |
| 32 | 8.245 7656 | 8.252 8829 | 8.259 8856 | 8.266 7772 | 8.273 5612 | 8.280 2410 | 28 |
| 33 | 8.245 8852 | 8.253 0006 | 8.260 0014 | 8.266 8911 | 8.273 6734 | 8.280 3515 | 27 |
| 34 | 8.246 0047 | 8.253 1182 | 8.260 1171 | 8.267 0051 | 8.273 7856 | 8.280 4619 | 26 |
| 35 | 8.246 1242 | 8.253 2358 | 8.260 2328 | 8.267 1189 | 8.273 8977 | 8.280 5723 | 25 |
| 36 | 8.246 2437 | 8.253 3533 | 8.260 3485 | 8.267 2328 | 8.274 0098 | 8.280 6827 | 24 |
| 37 | 8.246 3632 | 8.253 4708 | 8.260 4641 | 8.267 3466 | 8.274 1218 | 8.280 7930 | 23 |
| 38 | 8.246 4826 | 8.253 5883 | 8.260 5797 | 8.267 4604 | 8.274 2338 | 8.280 9034 | 22 |
| 39 | 8.246 6020 | 8.253 7058 | 8.260 6953 | 8.267 5742 | 8.274 3458 | 8.281 0136 | 21 |
| 40 | 8.246 7213 | 8.253 8232 | 8.260 8108 | 8.267 6879 | 8.274 4578 | 8.281 1239 | 20 |
| 41 | 8.246 8407 | 8.253 9406 | 8.260 9263 | 8.267 8016 | 8.274 5698 | 8.281 2342 | 19 |
| 42 | 8.246 9599 | 8.254 0579 | 8.261 0418 | 8.267 9153 | 8.274 6817 | 8.281 3444 | 18 |
| 43 | 8.247 0792 | 8.254 1752 | 8.261 1573 | 8.268 0289 | 8.274 7936 | 8.281 4545 | 17 |
| 44 | 8.247 1984 | 8.254 2925 | 8.261 2727 | 8.268 1425 | 8.274 9054 | 8.281 5647 | 16 |
| 45 | 8.247 3176 | 8.254 4098 | 8.261 3881 | 8.268 2561 | 8.275 0173 | 8.281 6748 | 15 |
| 46 | 8.247 4368 | 8.254 5270 | 8.261 5034 | 8.268 3696 | 8.275 1291 | 8.281 7849 | 14 |
| 47 | 8.247 5559 | 8.254 6442 | 8.261 6188 | 8.268 4832 | 8.275 2408 | 8.281 8950 | 13 |
| 48 | 8.247 6750 | 8.254 7614 | 8.261 7341 | 8.268 5967 | 8.275 3526 | 8.282 0051 | 12 |
| 49 | 8.247 7940 | 8.254 8785 | 8.261 8493 | 8.268 7101 | 8.275 4643 | 8.282 1151 | 11 |
| 50 | 8.247 9131 | 8.254 9956 | 8.261 9646 | 8.268 8236 | 8.275 5760 | 8.282 2251 | 10 |
| 51 | 8.248 0321 | 8.255 1127 | 8.262 0798 | 8.268 9370 | 8.275 6876 | 8.282 3350 | 9  |
| 52 | 8.248 1510 | 8.255 2297 | 8.262 1950 | 8.269 0503 | 8.275 7992 | 8.282 4450 | 8  |
| 53 | 8.248 2699 | 8.255 3467 | 8.262 3101 | 8.269 1637 | 8.275 9108 | 8.282 5549 | 7  |
| 54 | 8.248 3888 | 8.255 4637 | 8.262 4252 | 8.269 2770 | 8.276 0224 | 8.282 6647 | 6  |
| 55 | 8.248 5077 | 8.255 5806 | 8.262 5403 | 8.269 3903 | 8.276 1340 | 8.282 7746 | 5  |
| 56 | 8.248 6265 | 8.255 6976 | 8.262 6554 | 8.269 5035 | 8.276 2455 | 8.282 8844 | 4  |
| 57 | 8.248 7453 | 8.255 8144 | 8.262 7704 | 8.269 6168 | 8.276 3570 | 8.282 9942 | 3  |
| 58 | 8.248 8641 | 8.255 9313 | 8.262 8854 | 8.269 7300 | 8.276 4684 | 8.283 1040 | 2  |
| 59 | 8.248 9828 | 8.256 0481 | 8.263 0004 | 8.269 8431 | 8.276 5798 | 8.283 2137 | 1  |
| 60 | 8.249 1015 | 8.256 1649 | 8.263 1153 | 8.269 9563 | 8.276 6912 | 8.283 3234 | 0  |
| "  | 59'        | 58'        | 57'        | 56'        | 55'        | 54'        | "  |



| "  | 6'         | 7'         | 8'         | 9'         | 10'        | 11'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.283 2434 | 8.289 7734 | 8.296 2067 | 8.302 5460 | 8.308 7941 | 8.314 9536 | 60 |
| 1  | 8.283 3530 | 8.289 8814 | 8.296 3131 | 8.302 6509 | 8.308 8975 | 8.315 0555 | 59 |
| 2  | 8.283 4626 | 8.289 9894 | 8.296 4195 | 8.302 7558 | 8.309 0009 | 8.315 1574 | 58 |
| 3  | 8.283 5722 | 8.290 0974 | 8.296 5259 | 8.302 8606 | 8.309 1042 | 8.315 2593 | 57 |
| 4  | 8.283 6818 | 8.290 1053 | 8.296 6322 | 8.302 9654 | 8.309 2075 | 8.315 3611 | 56 |
| 5  | 8.283 7913 | 8.290 3132 | 8.296 7385 | 8.303 0702 | 8.309 3108 | 8.315 4630 | 55 |
| 6  | 8.283 9008 | 8.290 4211 | 8.296 8448 | 8.303 1749 | 8.309 4140 | 8.315 5648 | 54 |
| 7  | 8.284 0103 | 8.290 5289 | 8.296 9511 | 8.303 2796 | 8.309 5173 | 8.315 6665 | 53 |
| 8  | 8.284 1197 | 8.290 6367 | 8.297 0573 | 8.303 3843 | 8.309 6205 | 8.315 7683 | 52 |
| 9  | 8.284 2292 | 8.290 7445 | 8.297 1635 | 8.303 4890 | 8.309 7237 | 8.315 8700 | 51 |
| 10 | 8.284 3386 | 8.290 8523 | 8.297 2697 | 8.303 5937 | 8.309 8268 | 8.315 9717 | 50 |
| 11 | 8.284 4479 | 8.290 9600 | 8.297 3759 | 8.303 6983 | 8.309 9299 | 8.316 0734 | 49 |
| 12 | 8.284 5573 | 8.291 0677 | 8.297 4820 | 8.303 8029 | 8.310 0330 | 8.316 1751 | 48 |
| 13 | 8.284 6666 | 8.291 1754 | 8.297 5881 | 8.303 9075 | 8.310 1361 | 8.316 2767 | 47 |
| 14 | 8.284 7759 | 8.291 2831 | 8.297 6942 | 8.304 0120 | 8.310 2392 | 8.316 3783 | 46 |
| 15 | 8.284 8851 | 8.291 3907 | 8.297 8002 | 8.304 1165 | 8.310 3422 | 8.316 4799 | 45 |
| 16 | 8.284 9943 | 8.291 4983 | 8.297 9063 | 8.304 2210 | 8.310 4452 | 8.316 5815 | 44 |
| 17 | 8.285 1035 | 8.291 6059 | 8.298 0123 | 8.304 3255 | 8.310 5482 | 8.316 6830 | 43 |
| 18 | 8.285 2127 | 8.291 7134 | 8.298 1182 | 8.304 4299 | 8.310 6512 | 8.316 7845 | 42 |
| 19 | 8.285 3219 | 8.291 8210 | 8.298 2242 | 8.304 5344 | 8.310 7541 | 8.316 8860 | 41 |
| 20 | 8.285 4310 | 8.291 9285 | 8.298 3301 | 8.304 6388 | 8.310 8570 | 8.316 9875 | 40 |
| 21 | 8.285 5401 | 8.292 0359 | 8.298 4360 | 8.304 7431 | 8.310 9599 | 8.317 0889 | 39 |
| 22 | 8.285 6491 | 8.292 1434 | 8.298 5419 | 8.304 8475 | 8.311 0628 | 8.317 1903 | 38 |
| 23 | 8.285 7582 | 8.292 2508 | 8.298 6477 | 8.304 9518 | 8.311 1656 | 8.317 2917 | 37 |
| 24 | 8.285 8672 | 8.292 3582 | 8.298 7536 | 8.305 0561 | 8.311 2684 | 8.317 3931 | 36 |
| 25 | 8.285 9762 | 8.292 4656 | 8.298 8594 | 8.305 1604 | 8.311 3712 | 8.317 4945 | 35 |
| 26 | 8.286 0851 | 8.292 5729 | 8.298 9651 | 8.305 2646 | 8.311 4740 | 8.317 5958 | 34 |
| 27 | 8.286 1941 | 8.292 6802 | 8.299 0709 | 8.305 3688 | 8.311 5767 | 8.317 6971 | 33 |
| 28 | 8.286 3030 | 8.292 7875 | 8.299 1766 | 8.305 4730 | 8.311 6794 | 8.317 7984 | 32 |
| 29 | 8.286 4118 | 8.292 8948 | 8.299 2823 | 8.305 5772 | 8.311 7821 | 8.317 8996 | 31 |
| 30 | 8.286 5207 | 8.293 0020 | 8.299 3879 | 8.305 6813 | 8.311 8848 | 8.318 0008 | 30 |
| 31 | 8.286 6295 | 8.293 1092 | 8.299 4936 | 8.305 7855 | 8.311 9874 | 8.318 1021 | 29 |
| 32 | 8.286 7383 | 8.293 2164 | 8.299 5992 | 8.305 8896 | 8.312 0901 | 8.318 2032 | 28 |
| 33 | 8.286 8471 | 8.293 3235 | 8.299 7048 | 8.305 9936 | 8.312 1927 | 8.318 3044 | 27 |
| 34 | 8.286 9558 | 8.293 4306 | 8.299 8104 | 8.306 0977 | 8.312 2952 | 8.318 4055 | 26 |
| 35 | 8.287 0645 | 8.293 5378 | 8.299 9159 | 8.306 2017 | 8.312 3978 | 8.318 5067 | 25 |
| 36 | 8.287 1732 | 8.293 6448 | 8.300 0214 | 8.306 3057 | 8.312 5003 | 8.318 6077 | 24 |
| 37 | 8.287 2818 | 8.293 7519 | 8.300 1269 | 8.306 4097 | 8.312 6028 | 8.318 7088 | 23 |
| 38 | 8.287 3905 | 8.293 8589 | 8.300 2324 | 8.306 5136 | 8.312 7053 | 8.318 8098 | 22 |
| 39 | 8.287 4991 | 8.293 9659 | 8.300 3378 | 8.306 6175 | 8.312 8077 | 8.318 9109 | 21 |
| 40 | 8.287 6076 | 8.294 0729 | 8.300 4432 | 8.306 7214 | 8.312 9101 | 8.319 0119 | 20 |
| 41 | 8.287 7162 | 8.294 1798 | 8.300 5486 | 8.306 8253 | 8.313 0125 | 8.319 1128 | 19 |
| 42 | 8.287 8247 | 8.294 2867 | 8.300 6539 | 8.306 9291 | 8.313 1149 | 8.319 2138 | 18 |
| 43 | 8.287 9332 | 8.294 3936 | 8.300 7593 | 8.307 0330 | 8.313 2173 | 8.319 3147 | 17 |
| 44 | 8.288 0417 | 8.294 5005 | 8.300 8646 | 8.307 1368 | 8.313 3196 | 8.319 4156 | 16 |
| 45 | 8.288 1501 | 8.294 6073 | 8.300 9699 | 8.307 2405 | 8.313 4219 | 8.319 5165 | 15 |
| 46 | 8.288 2585 | 8.294 7141 | 8.301 0751 | 8.307 3443 | 8.313 5242 | 8.319 6173 | 14 |
| 47 | 8.288 3669 | 8.294 8209 | 8.301 1804 | 8.307 4480 | 8.313 6264 | 8.319 7182 | 13 |
| 48 | 8.288 4752 | 8.294 9277 | 8.301 2856 | 8.307 5517 | 8.313 7287 | 8.319 8190 | 12 |
| 49 | 8.288 5836 | 8.295 0344 | 8.301 3907 | 8.307 6554 | 8.313 8309 | 8.319 9198 | 11 |
| 50 | 8.288 6919 | 8.295 1411 | 8.301 4959 | 8.307 7590 | 8.313 9331 | 8.320 0205 | 10 |
| 51 | 8.288 8002 | 8.295 2478 | 8.301 6010 | 8.307 8626 | 8.314 0352 | 8.320 1213 | 9  |
| 52 | 8.288 9084 | 8.295 3544 | 8.301 7061 | 8.307 9662 | 8.314 1374 | 8.320 2220 | 8  |
| 53 | 8.289 0166 | 8.295 4611 | 8.301 8112 | 8.308 0698 | 8.314 2395 | 8.320 3227 | 7  |
| 54 | 8.289 1248 | 8.295 5677 | 8.301 9163 | 8.308 1734 | 8.314 3416 | 8.320 4233 | 6  |
| 55 | 8.289 2330 | 8.295 6742 | 8.302 0213 | 8.308 2769 | 8.314 4436 | 8.320 5240 | 5  |
| 56 | 8.289 3411 | 8.295 7808 | 8.302 1263 | 8.308 3804 | 8.314 5457 | 8.320 6246 | 4  |
| 57 | 8.289 4492 | 8.295 8873 | 8.302 2313 | 8.308 4839 | 8.314 6477 | 8.320 7252 | 3  |
| 58 | 8.289 5573 | 8.295 9938 | 8.302 3362 | 8.308 5873 | 8.314 7497 | 8.320 8258 | 2  |
| 59 | 8.289 6654 | 8.296 1003 | 8.302 4411 | 8.308 6907 | 8.314 8516 | 8.320 9263 | 1  |
| 60 | 8.289 7734 | 8.296 2067 | 8.302 5460 | 8.308 7941 | 8.314 9536 | 8.321 0269 | 0  |
| "  | 53'        | 52'        | 51'        | 50'        | 49'        | 48'        | "  |

cos 88°



| "  | 6'         | 7'         | 8'         | 9'         | 10'        | 11'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.283 3234 | 8.289 8559 | 8.296 2917 | 8.302 6335 | 8.308 8842 | 8.315 0462 | 60 |
| 1  | 8.283 4331 | 8.289 9640 | 8.296 3981 | 8.302 7385 | 8.308 9876 | 8.315 1482 | 59 |
| 2  | 8.283 5428 | 8.290 0720 | 8.296 5046 | 8.302 8433 | 8.309 0910 | 8.315 2501 | 58 |
| 3  | 8.283 6524 | 8.290 1800 | 8.296 6110 | 8.302 9482 | 8.309 1944 | 8.315 3520 | 57 |
| 4  | 8.283 7620 | 8.290 2879 | 8.296 7174 | 8.303 0531 | 8.309 2977 | 8.315 4539 | 56 |
| 5  | 8.283 8716 | 8.290 3959 | 8.296 8237 | 8.303 1579 | 8.309 4010 | 8.315 5558 | 55 |
| 6  | 8.283 9811 | 8.290 5038 | 8.296 9300 | 8.303 2627 | 8.309 5043 | 8.315 6576 | 54 |
| 7  | 8.284 0906 | 8.290 6117 | 8.297 0363 | 8.303 3674 | 8.309 6076 | 8.315 7595 | 53 |
| 8  | 8.284 2001 | 8.290 7195 | 8.297 1426 | 8.303 4722 | 8.309 7109 | 8.315 8613 | 52 |
| 9  | 8.284 3096 | 8.290 8274 | 8.297 2489 | 8.303 5769 | 8.309 8141 | 8.315 9630 | 51 |
| 10 | 8.284 4190 | 8.290 9352 | 8.297 3551 | 8.303 6816 | 8.309 9173 | 8.316 0648 | 50 |
| 11 | 8.284 5284 | 8.291 0430 | 8.297 4613 | 8.303 7862 | 8.310 0205 | 8.316 1665 | 49 |
| 12 | 8.284 6378 | 8.291 1507 | 8.297 5675 | 8.303 8909 | 8.310 1236 | 8.316 2682 | 48 |
| 13 | 8.284 7471 | 8.291 2584 | 8.297 6736 | 8.303 9955 | 8.310 2267 | 8.316 3699 | 47 |
| 14 | 8.284 8565 | 8.291 3661 | 8.297 7797 | 8.304 1001 | 8.310 3298 | 8.316 4715 | 46 |
| 15 | 8.284 9658 | 8.291 4738 | 8.297 8858 | 8.304 2046 | 8.310 4329 | 8.316 5732 | 45 |
| 16 | 8.285 0750 | 8.291 5815 | 8.297 9919 | 8.304 3092 | 8.310 5360 | 8.316 6748 | 44 |
| 17 | 8.285 1843 | 8.291 6891 | 8.298 0980 | 8.304 4137 | 8.310 6390 | 8.316 7764 | 43 |
| 18 | 8.285 2935 | 8.291 7967 | 8.298 2040 | 8.304 5182 | 8.310 7420 | 8.316 8779 | 42 |
| 19 | 8.285 4027 | 8.291 9042 | 8.298 3100 | 8.304 6226 | 8.310 8450 | 8.316 9795 | 41 |
| 20 | 8.285 5118 | 8.292 0118 | 8.298 4159 | 8.304 7271 | 8.310 9479 | 8.317 0810 | 40 |
| 21 | 8.285 6210 | 8.292 1193 | 8.298 5219 | 8.304 8315 | 8.311 0508 | 8.317 1825 | 39 |
| 22 | 8.285 7301 | 8.292 2268 | 8.298 6278 | 8.304 9359 | 8.311 1538 | 8.317 2839 | 38 |
| 23 | 8.285 8392 | 8.292 3342 | 8.298 7337 | 8.305 0403 | 8.311 2566 | 8.317 3854 | 37 |
| 24 | 8.285 9482 | 8.292 4417 | 8.298 8395 | 8.305 1446 | 8.311 3595 | 8.317 4868 | 36 |
| 25 | 8.286 0572 | 8.292 5491 | 8.298 9454 | 8.305 2489 | 8.311 4623 | 8.317 5882 | 35 |
| 26 | 8.286 1662 | 8.292 6565 | 8.299 0512 | 8.305 3532 | 8.311 5651 | 8.317 6895 | 34 |
| 27 | 8.286 2752 | 8.292 7638 | 8.299 1570 | 8.305 4575 | 8.311 6679 | 8.317 7909 | 33 |
| 28 | 8.286 3841 | 8.292 8711 | 8.299 2627 | 8.305 5617 | 8.311 7707 | 8.317 8922 | 32 |
| 29 | 8.286 4931 | 8.292 9784 | 8.299 3685 | 8.305 6659 | 8.311 8734 | 8.317 9935 | 31 |
| 30 | 8.286 6019 | 8.293 0857 | 8.299 4742 | 8.305 7701 | 8.311 9761 | 8.318 0948 | 30 |
| 31 | 8.286 7108 | 8.293 1930 | 8.299 5799 | 8.305 8743 | 8.312 0788 | 8.318 1960 | 29 |
| 32 | 8.286 8196 | 8.293 3002 | 8.299 6855 | 8.305 9784 | 8.312 1815 | 8.318 2973 | 28 |
| 33 | 8.286 9284 | 8.293 4074 | 8.299 7911 | 8.306 0825 | 8.312 2841 | 8.318 3985 | 27 |
| 34 | 8.287 0372 | 8.293 5145 | 8.299 8967 | 8.306 1866 | 8.312 3867 | 8.318 4997 | 26 |
| 35 | 8.287 1460 | 8.293 6217 | 8.300 0023 | 8.306 2907 | 8.312 4893 | 8.318 6008 | 25 |
| 36 | 8.287 2547 | 8.293 7288 | 8.300 1079 | 8.306 3947 | 8.312 5919 | 8.318 7019 | 24 |
| 37 | 8.287 3634 | 8.293 8359 | 8.300 2134 | 8.306 4987 | 8.312 6944 | 8.318 8031 | 23 |
| 38 | 8.287 4720 | 8.293 9429 | 8.300 3189 | 8.306 6027 | 8.312 7969 | 8.318 9041 | 22 |
| 39 | 8.287 5807 | 8.294 0500 | 8.300 4244 | 8.306 7067 | 8.312 8994 | 8.319 0052 | 21 |
| 40 | 8.287 6893 | 8.294 1570 | 8.300 5298 | 8.306 8106 | 8.313 0019 | 8.319 1062 | 20 |
| 41 | 8.287 7979 | 8.294 2640 | 8.300 6353 | 8.306 9145 | 8.313 1043 | 8.319 2073 | 19 |
| 42 | 8.287 9065 | 8.294 3709 | 8.300 7407 | 8.307 0184 | 8.313 2068 | 8.319 3083 | 18 |
| 43 | 8.288 0150 | 8.294 4779 | 8.300 8460 | 8.307 1223 | 8.313 3092 | 8.319 4092 | 17 |
| 44 | 8.288 1235 | 8.294 5848 | 8.300 9514 | 8.307 2261 | 8.313 4115 | 8.319 5102 | 16 |
| 45 | 8.288 2320 | 8.294 6916 | 8.301 0567 | 8.307 3299 | 8.313 5139 | 8.319 6111 | 15 |
| 46 | 8.288 3404 | 8.294 7985 | 8.301 1620 | 8.307 4337 | 8.313 6162 | 8.319 7120 | 14 |
| 47 | 8.288 4488 | 8.294 9053 | 8.301 2673 | 8.307 5375 | 8.313 7185 | 8.319 8129 | 13 |
| 48 | 8.288 5572 | 8.295 0121 | 8.301 3725 | 8.307 6412 | 8.313 8208 | 8.319 9137 | 12 |
| 49 | 8.288 6656 | 8.295 1189 | 8.301 4778 | 8.307 7449 | 8.313 9230 | 8.320 0145 | 11 |
| 50 | 8.288 7740 | 8.295 2256 | 8.301 5830 | 8.307 8486 | 8.314 0253 | 8.320 1154 | 10 |
| 51 | 8.288 8823 | 8.295 3324 | 8.301 6881 | 8.307 9523 | 8.314 1275 | 8.320 2161 | 9  |
| 52 | 8.288 9906 | 8.295 4391 | 8.301 7933 | 8.308 0559 | 8.314 2296 | 8.320 3169 | 8  |
| 53 | 8.289 0988 | 8.295 5457 | 8.301 8984 | 8.308 1596 | 8.314 3318 | 8.320 4176 | 7  |
| 54 | 8.289 2071 | 8.295 6524 | 8.302 0035 | 8.308 2631 | 8.314 4339 | 8.320 5183 | 6  |
| 55 | 8.289 3153 | 8.295 7590 | 8.302 1086 | 8.308 3667 | 8.314 5360 | 8.320 6190 | 5  |
| 56 | 8.289 4235 | 8.295 8656 | 8.302 2136 | 8.308 4703 | 8.314 6381 | 8.320 7197 | 4  |
| 57 | 8.289 5316 | 8.295 9721 | 8.302 3186 | 8.308 5738 | 8.314 7402 | 8.320 8203 | 3  |
| 58 | 8.289 6397 | 8.296 0787 | 8.302 4236 | 8.308 6773 | 8.314 8422 | 8.320 9210 | 2  |
| 59 | 8.289 7478 | 8.296 1852 | 8.302 5286 | 8.308 7807 | 8.314 9442 | 8.321 0215 | 1  |
| 60 | 8.289 8559 | 8.296 2917 | 8.302 6335 | 8.308 8842 | 8.315 0462 | 8.321 1221 | 0  |
| "  | 58'        | 52'        | 51'        | 50'        | 49'        | 48'        | "  |



| "  | 12'        | 13'        | 14'        | 15'        | 16'        | 17'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.321 0269 | 8.327 0163 | 8.332 9243 | 8.338 7529 | 8.344 5043 | 8.350 1805 | 60 |
| 1  | 8.321 1274 | 8.327 1155 | 8.333 0221 | 8.338 8494 | 8.344 5995 | 8.350 2745 | 59 |
| 2  | 8.321 2278 | 8.327 2146 | 8.333 1199 | 8.338 9459 | 8.344 6947 | 8.350 3685 | 58 |
| 3  | 8.321 3283 | 8.327 3137 | 8.333 2176 | 8.339 0423 | 8.344 7899 | 8.350 4624 | 57 |
| 4  | 8.321 4287 | 8.327 4127 | 8.333 3153 | 8.339 1387 | 8.344 8851 | 8.350 5563 | 56 |
| 5  | 8.321 5292 | 8.327 5118 | 8.333 4130 | 8.339 2351 | 8.344 9802 | 8.350 6502 | 55 |
| 6  | 8.321 6295 | 8.327 6108 | 8.333 5107 | 8.339 3315 | 8.345 0753 | 8.350 7441 | 54 |
| 7  | 8.321 7299 | 8.327 7098 | 8.333 6084 | 8.339 4279 | 8.345 1704 | 8.350 8379 | 53 |
| 8  | 8.321 8303 | 8.327 8087 | 8.333 7060 | 8.339 5242 | 8.345 2655 | 8.350 9318 | 52 |
| 9  | 8.321 9306 | 8.327 9077 | 8.333 8036 | 8.339 6205 | 8.345 3605 | 8.351 0256 | 51 |
| 10 | 8.322 0309 | 8.328 0066 | 8.333 9012 | 8.339 7168 | 8.345 4555 | 8.351 1194 | 50 |
| 11 | 8.322 1311 | 8.328 1055 | 8.333 9988 | 8.339 8131 | 8.345 5505 | 8.351 2132 | 49 |
| 12 | 8.322 2314 | 8.328 2044 | 8.334 0963 | 8.339 9093 | 8.345 6455 | 8.351 3069 | 48 |
| 13 | 8.322 3316 | 8.328 3032 | 8.334 1938 | 8.340 0055 | 8.345 7405 | 8.351 4006 | 47 |
| 14 | 8.322 4318 | 8.328 4021 | 8.334 2913 | 8.340 1018 | 8.345 8354 | 8.351 4944 | 46 |
| 15 | 8.322 5320 | 8.328 5009 | 8.334 3888 | 8.340 1979 | 8.345 9304 | 8.351 5881 | 45 |
| 16 | 8.322 6322 | 8.328 5997 | 8.334 4863 | 8.340 2941 | 8.346 0253 | 8.351 6817 | 44 |
| 17 | 8.322 7323 | 8.328 6984 | 8.334 5837 | 8.340 3902 | 8.346 1201 | 8.351 7754 | 43 |
| 18 | 8.322 8324 | 8.328 7972 | 8.334 6811 | 8.340 4864 | 8.346 2150 | 8.351 8690 | 42 |
| 19 | 8.322 9325 | 8.328 8959 | 8.334 7785 | 8.340 5825 | 8.346 3098 | 8.351 9626 | 41 |
| 20 | 8.323 0326 | 8.328 9946 | 8.334 8759 | 8.340 6785 | 8.346 4047 | 8.352 0562 | 40 |
| 21 | 8.323 1326 | 8.329 0933 | 8.334 9732 | 8.340 7746 | 8.346 4995 | 8.352 1498 | 39 |
| 22 | 8.323 2326 | 8.329 1919 | 8.335 0706 | 8.340 8706 | 8.346 5942 | 8.352 2433 | 38 |
| 23 | 8.323 3326 | 8.329 2906 | 8.335 1679 | 8.340 9666 | 8.346 6890 | 8.352 3369 | 37 |
| 24 | 8.323 4326 | 8.329 3892 | 8.335 2651 | 8.341 0626 | 8.346 7837 | 8.352 4304 | 36 |
| 25 | 8.323 5325 | 8.329 4878 | 8.335 3624 | 8.341 1586 | 8.346 8784 | 8.352 5239 | 35 |
| 26 | 8.323 6325 | 8.329 5863 | 8.335 4597 | 8.341 2546 | 8.346 9731 | 8.352 6173 | 34 |
| 27 | 8.323 7324 | 8.329 6849 | 8.335 5569 | 8.341 3505 | 8.347 0678 | 8.352 7108 | 33 |
| 28 | 8.323 8322 | 8.329 7834 | 8.335 6541 | 8.341 4464 | 8.347 1625 | 8.352 8042 | 32 |
| 29 | 8.323 9321 | 8.329 8819 | 8.335 7512 | 8.341 5423 | 8.347 2571 | 8.352 8976 | 31 |
| 30 | 8.324 0319 | 8.329 9804 | 8.335 8484 | 8.341 6382 | 8.347 3517 | 8.352 9910 | 30 |
| 31 | 8.324 1317 | 8.330 0788 | 8.335 9455 | 8.341 7340 | 8.347 4463 | 8.353 0844 | 29 |
| 32 | 8.324 2315 | 8.330 1773 | 8.336 0426 | 8.341 8298 | 8.347 5409 | 8.353 1778 | 28 |
| 33 | 8.324 3313 | 8.330 2757 | 8.336 1397 | 8.341 9256 | 8.347 6354 | 8.353 2711 | 27 |
| 34 | 8.324 4310 | 8.330 3740 | 8.336 2368 | 8.342 0214 | 8.347 7300 | 8.353 3644 | 26 |
| 35 | 8.324 5308 | 8.330 4724 | 8.336 3338 | 8.342 1172 | 8.347 8245 | 8.353 4577 | 25 |
| 36 | 8.324 6305 | 8.330 5708 | 8.336 4309 | 8.342 2129 | 8.347 9189 | 8.353 5510 | 24 |
| 37 | 8.324 7301 | 8.330 6691 | 8.336 5279 | 8.342 3086 | 8.348 0134 | 8.353 6442 | 23 |
| 38 | 8.324 8298 | 8.330 7674 | 8.336 6248 | 8.342 4043 | 8.348 1079 | 8.353 7374 | 22 |
| 39 | 8.324 9294 | 8.330 8656 | 8.336 7218 | 8.342 5000 | 8.348 2023 | 8.353 8306 | 21 |
| 40 | 8.325 0290 | 8.330 9639 | 8.336 8187 | 8.342 5957 | 8.348 2967 | 8.353 9238 | 20 |
| 41 | 8.325 1286 | 8.331 0621 | 8.336 9156 | 8.342 6913 | 8.348 3911 | 8.354 0170 | 19 |
| 42 | 8.325 2282 | 8.331 1603 | 8.337 0125 | 8.342 7869 | 8.348 4854 | 8.354 1102 | 18 |
| 43 | 8.325 3277 | 8.331 2585 | 8.337 1094 | 8.342 8825 | 8.348 5798 | 8.354 2033 | 17 |
| 44 | 8.325 4272 | 8.331 3567 | 8.337 2063 | 8.342 9781 | 8.348 6741 | 8.354 2964 | 16 |
| 45 | 8.325 5267 | 8.331 4548 | 8.337 3031 | 8.343 0736 | 8.348 7684 | 8.354 3895 | 15 |
| 46 | 8.325 6262 | 8.331 5529 | 8.337 3999 | 8.343 1691 | 8.348 8627 | 8.354 4826 | 14 |
| 47 | 8.325 7256 | 8.331 6510 | 8.337 4967 | 8.343 2646 | 8.348 9570 | 8.354 5756 | 13 |
| 48 | 8.325 8250 | 8.331 7491 | 8.337 5934 | 8.343 3601 | 8.349 0512 | 8.354 6686 | 12 |
| 49 | 8.325 9244 | 8.331 8472 | 8.337 6902 | 8.343 4556 | 8.349 1454 | 8.354 7617 | 11 |
| 50 | 8.326 0238 | 8.331 9452 | 8.337 7869 | 8.343 5510 | 8.349 2396 | 8.354 8546 | 10 |
| 51 | 8.326 1232 | 8.332 0432 | 8.337 8836 | 8.343 6465 | 8.349 3338 | 8.354 9476 | 9  |
| 52 | 8.326 2225 | 8.332 1412 | 8.337 9803 | 8.343 7419 | 8.349 4280 | 8.355 0406 | 8  |
| 53 | 8.326 3218 | 8.332 2392 | 8.338 0769 | 8.343 8372 | 8.349 5221 | 8.355 1335 | 7  |
| 54 | 8.326 4211 | 8.332 3371 | 8.338 1736 | 8.343 9326 | 8.349 6162 | 8.355 2264 | 6  |
| 55 | 8.326 5204 | 8.332 4350 | 8.338 2702 | 8.344 0279 | 8.349 7103 | 8.355 3193 | 5  |
| 56 | 8.326 6196 | 8.332 5329 | 8.338 3668 | 8.344 1233 | 8.349 8044 | 8.355 4122 | 4  |
| 57 | 8.326 7188 | 8.332 6308 | 8.338 4633 | 8.344 2186 | 8.349 8985 | 8.355 5050 | 3  |
| 58 | 8.326 8180 | 8.332 7287 | 8.338 5599 | 8.344 3138 | 8.349 9925 | 8.355 5979 | 2  |
| 59 | 8.326 9172 | 8.332 8265 | 8.338 6564 | 8.344 4091 | 8.350 0865 | 8.355 6907 | 1  |
| 60 | 8.327 0163 | 8.332 9243 | 8.338 7529 | 8.344 5043 | 8.350 1805 | 8.355 7835 | 0  |
| "  | 47'        | 46'        | 45'        | 44'        | 43'        | 42'        | "  |



| "  | 12'        | 13'        | 14'        | 15'        | 16'        | 17'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.321 1221 | 8.327 1143 | 8.333 0249 | 8.338 8563 | 8.344 6105 | 8.350 2895 | 60 |
| 1  | 8.321 2227 | 8.327 2134 | 8.333 1228 | 8.338 9528 | 8.344 7057 | 8.350 3835 | 59 |
| 2  | 8.321 3232 | 8.327 3126 | 8.333 2206 | 8.339 0493 | 8.344 8010 | 8.350 4775 | 58 |
| 3  | 8.321 4237 | 8.327 4117 | 8.333 3184 | 8.339 1458 | 8.344 8962 | 8.350 5715 | 57 |
| 4  | 8.321 5242 | 8.327 5108 | 8.333 4161 | 8.339 2423 | 8.344 9914 | 8.350 6655 | 56 |
| 5  | 8.321 6246 | 8.327 6099 | 8.333 5139 | 8.339 3387 | 8.345 0866 | 8.350 7594 | 55 |
| 6  | 8.321 7251 | 8.327 7090 | 8.333 6116 | 8.339 4351 | 8.345 1817 | 8.350 8533 | 54 |
| 7  | 8.321 8255 | 8.327 8080 | 8.333 7093 | 8.339 5316 | 8.345 2769 | 8.350 9472 | 53 |
| 8  | 8.321 9259 | 8.327 9070 | 8.333 8070 | 8.339 6279 | 8.345 3720 | 8.351 0411 | 52 |
| 9  | 8.322 0262 | 8.328 0060 | 8.333 9046 | 8.339 7243 | 8.345 4671 | 8.351 1350 | 51 |
| 10 | 8.322 1266 | 8.328 1050 | 8.334 0023 | 8.339 8206 | 8.345 5621 | 8.351 2288 | 50 |
| 11 | 8.322 2269 | 8.328 2039 | 8.334 0999 | 8.339 9169 | 8.345 6572 | 8.351 3226 | 49 |
| 12 | 8.322 3272 | 8.328 3028 | 8.334 1975 | 8.340 0132 | 8.345 7522 | 8.351 4164 | 48 |
| 13 | 8.322 4274 | 8.328 4017 | 8.334 2950 | 8.340 1095 | 8.345 8472 | 8.351 5102 | 47 |
| 14 | 8.322 5277 | 8.328 5006 | 8.334 3926 | 8.340 2058 | 8.345 9422 | 8.351 6040 | 46 |
| 15 | 8.322 6279 | 8.328 5995 | 8.334 4901 | 8.340 3020 | 8.346 0372 | 8.351 6977 | 45 |
| 16 | 8.322 7281 | 8.328 6983 | 8.334 5876 | 8.340 3982 | 8.346 1321 | 8.351 7914 | 44 |
| 17 | 8.322 8283 | 8.328 7971 | 8.334 6851 | 8.340 4944 | 8.346 2271 | 8.351 8851 | 43 |
| 18 | 8.322 9285 | 8.328 8959 | 8.334 7826 | 8.340 5906 | 8.346 3220 | 8.351 9788 | 42 |
| 19 | 8.323 0286 | 8.328 9947 | 8.334 8800 | 8.340 6867 | 8.346 4169 | 8.352 0725 | 41 |
| 20 | 8.323 1287 | 8.329 0934 | 8.334 9774 | 8.340 7828 | 8.346 5117 | 8.352 1661 | 40 |
| 21 | 8.323 2288 | 8.329 1921 | 8.335 0748 | 8.340 8789 | 8.346 6066 | 8.352 2597 | 39 |
| 22 | 8.323 3288 | 8.329 2908 | 8.335 1722 | 8.340 9750 | 8.346 7014 | 8.352 3533 | 38 |
| 23 | 8.323 4289 | 8.329 3895 | 8.335 2695 | 8.341 0711 | 8.346 7962 | 8.352 4469 | 37 |
| 24 | 8.323 5289 | 8.329 4882 | 8.335 3669 | 8.341 1671 | 8.346 8910 | 8.352 5405 | 36 |
| 25 | 8.323 6289 | 8.329 5868 | 8.335 4642 | 8.341 2631 | 8.346 9857 | 8.352 6340 | 35 |
| 26 | 8.323 7289 | 8.329 6854 | 8.335 5615 | 8.341 3591 | 8.347 0805 | 8.352 7275 | 34 |
| 27 | 8.323 8288 | 8.329 7840 | 8.335 6587 | 8.341 4551 | 8.347 1752 | 8.352 8210 | 33 |
| 28 | 8.323 9287 | 8.329 8826 | 8.335 7560 | 8.341 5511 | 8.347 2699 | 8.352 9145 | 32 |
| 29 | 8.324 0286 | 8.329 9811 | 8.335 8532 | 8.341 6470 | 8.347 3646 | 8.353 0080 | 31 |
| 30 | 8.324 1285 | 8.330 0796 | 8.335 9504 | 8.341 7429 | 8.347 4592 | 8.353 1014 | 30 |
| 31 | 8.324 2284 | 8.330 1781 | 8.336 0476 | 8.341 8388 | 8.347 5539 | 8.353 1948 | 29 |
| 32 | 8.324 3282 | 8.330 2766 | 8.336 1447 | 8.341 9347 | 8.347 6485 | 8.353 2882 | 28 |
| 33 | 8.324 4280 | 8.330 3751 | 8.336 2419 | 8.342 0305 | 8.347 7431 | 8.353 3816 | 27 |
| 34 | 8.324 5278 | 8.330 4735 | 8.336 3390 | 8.342 1263 | 8.347 8377 | 8.353 4750 | 26 |
| 35 | 8.324 6276 | 8.330 5719 | 8.336 4361 | 8.342 2221 | 8.347 9322 | 8.353 5683 | 25 |
| 36 | 8.324 7273 | 8.330 6703 | 8.336 5331 | 8.342 3179 | 8.348 0268 | 8.353 6616 | 24 |
| 37 | 8.324 8270 | 8.330 7687 | 8.336 6302 | 8.342 4137 | 8.348 1213 | 8.353 7549 | 23 |
| 38 | 8.324 9267 | 8.330 8670 | 8.336 7272 | 8.342 5094 | 8.348 2158 | 8.353 8482 | 22 |
| 39 | 8.325 0264 | 8.330 9653 | 8.336 8242 | 8.342 6052 | 8.348 3103 | 8.353 9414 | 21 |
| 40 | 8.325 1260 | 8.331 0636 | 8.336 9212 | 8.342 7009 | 8.348 4047 | 8.354 0347 | 20 |
| 41 | 8.325 2257 | 8.331 1619 | 8.337 0181 | 8.342 7965 | 8.348 4991 | 8.354 1279 | 19 |
| 42 | 8.325 3253 | 8.331 2601 | 8.337 1151 | 8.342 8922 | 8.348 5936 | 8.354 2211 | 18 |
| 43 | 8.325 4249 | 8.331 3584 | 8.337 2120 | 8.342 9878 | 8.348 6879 | 8.354 3143 | 17 |
| 44 | 8.325 5244 | 8.331 4566 | 8.337 3089 | 8.343 0835 | 8.348 7823 | 8.354 4074 | 16 |
| 45 | 8.325 6240 | 8.331 5548 | 8.337 4058 | 8.343 1791 | 8.348 8767 | 8.354 5006 | 15 |
| 46 | 8.325 7235 | 8.331 6529 | 8.337 5026 | 8.343 2746 | 8.348 9710 | 8.354 5937 | 14 |
| 47 | 8.325 8230 | 8.331 7511 | 8.337 5994 | 8.343 3702 | 8.349 0653 | 8.354 6868 | 13 |
| 48 | 8.325 9224 | 8.331 8492 | 8.337 6963 | 8.343 4657 | 8.349 1596 | 8.354 7799 | 12 |
| 49 | 8.326 0219 | 8.331 9473 | 8.337 7930 | 8.343 5612 | 8.349 2539 | 8.354 8729 | 11 |
| 50 | 8.326 1213 | 8.332 0454 | 8.337 8898 | 8.343 6567 | 8.349 3481 | 8.354 9660 | 10 |
| 51 | 8.326 2207 | 8.332 1434 | 8.337 9866 | 8.343 7522 | 8.349 4423 | 8.355 0590 | 9  |
| 52 | 8.326 3201 | 8.332 2415 | 8.338 0833 | 8.343 8476 | 8.349 5365 | 8.355 1520 | 8  |
| 53 | 8.326 4194 | 8.332 3395 | 8.338 1800 | 8.343 9431 | 8.349 6307 | 8.355 2450 | 7  |
| 54 | 8.326 5188 | 8.332 4375 | 8.338 2767 | 8.344 0385 | 8.349 7249 | 8.355 3379 | 6  |
| 55 | 8.326 6181 | 8.332 5354 | 8.338 3733 | 8.344 1339 | 8.349 8191 | 8.355 4309 | 5  |
| 56 | 8.326 7173 | 8.332 6334 | 8.338 4700 | 8.344 2292 | 8.349 9132 | 8.355 5238 | 4  |
| 57 | 8.326 8166 | 8.332 7313 | 8.338 5666 | 8.344 3246 | 8.350 0073 | 8.355 6167 | 3  |
| 58 | 8.326 9158 | 8.332 8292 | 8.338 6632 | 8.344 4199 | 8.350 1014 | 8.355 7096 | 2  |
| 59 | 8.327 0151 | 8.332 9271 | 8.338 7597 | 8.344 5152 | 8.350 1954 | 8.355 8024 | 1  |
| 60 | 8.327 1143 | 8.333 0249 | 8.338 8563 | 8.344 6105 | 8.350 2895 | 8.355 8953 | 0  |
| "  | 47'        | 46'        | 45'        | 44'        | 43'        | 42'        | "  |

cotg 88°

CARNEGIE-MELLON UNIVERSITY  
PITTSBURGH, PENNSYLVANIA 15260



| "  | 18'        | 19'        | 20'        | 21'        | 22'        | 23'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.355 7835 | 8.361 3150 | 8.366 7769 | 8.372 1710 | 8.377 4988 | 8.382 7620 | 60 |
| 1  | 8.355 8762 | 8.361 4066 | 8.366 8674 | 8.372 2603 | 8.377 5870 | 8.382 8492 | 59 |
| 2  | 8.355 9690 | 8.361 4982 | 8.366 9578 | 8.372 3496 | 8.377 6753 | 8.382 9364 | 58 |
| 3  | 8.356 0617 | 8.361 5897 | 8.367 0482 | 8.372 4389 | 8.377 7635 | 8.383 0235 | 57 |
| 4  | 8.356 1544 | 8.361 6813 | 8.367 1386 | 8.372 5282 | 8.377 8517 | 8.383 1106 | 56 |
| 5  | 8.356 2471 | 8.361 7728 | 8.367 2290 | 8.372 6174 | 8.377 9398 | 8.383 1978 | 55 |
| 6  | 8.356 3398 | 8.361 8643 | 8.367 3193 | 8.372 7067 | 8.378 0280 | 8.383 2848 | 54 |
| 7  | 8.356 4324 | 8.361 9558 | 8.367 4097 | 8.372 7959 | 8.378 1161 | 8.383 3719 | 53 |
| 8  | 8.356 5251 | 8.362 0472 | 8.367 5000 | 8.372 8851 | 8.378 2042 | 8.383 4590 | 52 |
| 9  | 8.356 6177 | 8.362 1387 | 8.367 5903 | 8.372 9743 | 8.378 2924 | 8.383 5460 | 51 |
| 10 | 8.356 7103 | 8.362 2301 | 8.367 6806 | 8.373 0635 | 8.378 3804 | 8.383 6330 | 50 |
| 11 | 8.356 8029 | 8.362 3215 | 8.367 7708 | 8.373 1526 | 8.378 4685 | 8.383 7201 | 49 |
| 12 | 8.356 8954 | 8.362 4129 | 8.367 8611 | 8.373 2418 | 8.378 5566 | 8.383 8070 | 48 |
| 13 | 8.356 9880 | 8.362 5042 | 8.367 9513 | 8.373 3309 | 8.378 6446 | 8.383 8940 | 47 |
| 14 | 8.357 0805 | 8.362 5956 | 8.368 0415 | 8.373 4200 | 8.378 7326 | 8.383 9810 | 46 |
| 15 | 8.357 1730 | 8.362 6869 | 8.368 1317 | 8.373 5091 | 8.378 8206 | 8.384 0679 | 45 |
| 16 | 8.357 2654 | 8.362 7782 | 8.368 2219 | 8.373 5981 | 8.378 9086 | 8.384 1548 | 44 |
| 17 | 8.357 3579 | 8.362 8695 | 8.368 3120 | 8.373 6872 | 8.378 9965 | 8.384 2417 | 43 |
| 18 | 8.357 4503 | 8.362 9608 | 8.368 4022 | 8.373 7762 | 8.379 0845 | 8.384 3286 | 42 |
| 19 | 8.357 5427 | 8.363 0520 | 8.368 4923 | 8.373 8652 | 8.379 1724 | 8.384 4155 | 41 |
| 20 | 8.357 6351 | 8.363 1433 | 8.368 5824 | 8.373 9542 | 8.379 2603 | 8.384 5023 | 40 |
| 21 | 8.357 7275 | 8.363 2345 | 8.368 6725 | 8.374 0431 | 8.379 3482 | 8.384 5892 | 39 |
| 22 | 8.357 8199 | 8.363 3257 | 8.368 7625 | 8.374 1321 | 8.379 4361 | 8.384 6760 | 38 |
| 23 | 8.357 9122 | 8.363 4169 | 8.368 8526 | 8.374 2210 | 8.379 5239 | 8.384 7628 | 37 |
| 24 | 8.358 0045 | 8.363 5080 | 8.368 9426 | 8.374 3099 | 8.379 6117 | 8.384 8496 | 36 |
| 25 | 8.358 0968 | 8.363 5991 | 8.369 0326 | 8.374 3988 | 8.379 6996 | 8.384 9363 | 35 |
| 26 | 8.358 1891 | 8.363 6903 | 8.369 1226 | 8.374 4877 | 8.379 7874 | 8.385 0231 | 34 |
| 27 | 8.358 2814 | 8.363 7814 | 8.369 1125 | 8.374 5766 | 8.379 8751 | 8.385 1098 | 33 |
| 28 | 8.358 3736 | 8.363 8724 | 8.369 3025 | 8.374 6654 | 8.379 9629 | 8.385 1965 | 32 |
| 29 | 8.358 4658 | 8.363 9635 | 8.369 3924 | 8.374 7542 | 8.380 0507 | 8.385 2832 | 31 |
| 30 | 8.358 5580 | 8.364 0545 | 8.369 4823 | 8.374 8430 | 8.380 1384 | 8.385 3699 | 30 |
| 31 | 8.358 6502 | 8.364 1456 | 8.369 5722 | 8.374 9318 | 8.380 2261 | 8.385 4565 | 29 |
| 32 | 8.358 7424 | 8.364 2366 | 8.369 6621 | 8.375 0206 | 8.380 3138 | 8.385 5432 | 28 |
| 33 | 8.358 8345 | 8.364 3275 | 8.369 7519 | 8.375 1094 | 8.380 4015 | 8.385 6298 | 27 |
| 34 | 8.358 9266 | 8.364 4185 | 8.369 8418 | 8.375 1981 | 8.380 4891 | 8.385 7164 | 26 |
| 35 | 8.359 0187 | 8.364 5095 | 8.369 9316 | 8.375 2868 | 8.380 5768 | 8.385 8030 | 25 |
| 36 | 8.359 1108 | 8.364 6004 | 8.370 0214 | 8.375 3755 | 8.380 6644 | 8.385 8896 | 24 |
| 37 | 8.359 2029 | 8.364 6913 | 8.370 1111 | 8.375 4642 | 8.380 7520 | 8.385 9761 | 23 |
| 38 | 8.359 2949 | 8.364 7822 | 8.370 2009 | 8.375 5528 | 8.380 8396 | 8.386 0627 | 22 |
| 39 | 8.359 3870 | 8.364 8730 | 8.370 2907 | 8.375 6415 | 8.380 9271 | 8.386 1492 | 21 |
| 40 | 8.359 4790 | 8.364 9639 | 8.370 3804 | 8.375 7301 | 8.381 0147 | 8.386 2357 | 20 |
| 41 | 8.359 5709 | 8.365 0547 | 8.370 4701 | 8.375 8187 | 8.381 1022 | 8.386 3222 | 19 |
| 42 | 8.359 6629 | 8.365 1455 | 8.370 5598 | 8.375 9073 | 8.381 1897 | 8.386 4087 | 18 |
| 43 | 8.359 7549 | 8.365 2363 | 8.370 6494 | 8.375 9959 | 8.381 2772 | 8.386 4951 | 17 |
| 44 | 8.359 8468 | 8.365 3271 | 8.370 7391 | 8.376 0844 | 8.381 3647 | 8.386 5816 | 16 |
| 45 | 8.359 9387 | 8.365 4179 | 8.370 8287 | 8.376 1729 | 8.381 4522 | 8.386 6680 | 15 |
| 46 | 8.360 0306 | 8.365 5086 | 8.370 9183 | 8.376 2615 | 8.381 5396 | 8.386 7544 | 14 |
| 47 | 8.360 1225 | 8.365 5993 | 8.371 0079 | 8.376 3500 | 8.381 6271 | 8.386 8408 | 13 |
| 48 | 8.360 2143 | 8.365 6900 | 8.371 0975 | 8.376 4384 | 8.381 7145 | 8.386 9271 | 12 |
| 49 | 8.360 3061 | 8.365 7807 | 8.371 1870 | 8.376 5269 | 8.381 8019 | 8.387 0135 | 11 |
| 50 | 8.360 3979 | 8.365 8713 | 8.371 2766 | 8.376 6153 | 8.381 8892 | 8.387 0998 | 10 |
| 51 | 8.360 4897 | 8.365 9620 | 8.371 3661 | 8.376 7038 | 8.381 9766 | 8.387 1861 | 9  |
| 52 | 8.360 5815 | 8.366 0526 | 8.371 4556 | 8.376 7922 | 8.382 0639 | 8.387 2724 | 8  |
| 53 | 8.360 6733 | 8.366 1432 | 8.371 5451 | 8.376 8806 | 8.382 1513 | 8.387 3587 | 7  |
| 54 | 8.360 7650 | 8.366 2338 | 8.371 6346 | 8.376 9689 | 8.382 2386 | 8.387 4450 | 6  |
| 55 | 8.360 8567 | 8.366 3244 | 8.371 7240 | 8.377 0573 | 8.382 3258 | 8.387 5312 | 5  |
| 56 | 8.360 9484 | 8.366 4149 | 8.371 8134 | 8.377 1456 | 8.382 4131 | 8.387 6174 | 4  |
| 57 | 8.361 0401 | 8.366 5054 | 8.371 9028 | 8.377 2339 | 8.382 5004 | 8.387 7037 | 3  |
| 58 | 8.361 1317 | 8.366 5959 | 8.371 9922 | 8.377 3222 | 8.382 5876 | 8.387 7898 | 2  |
| 59 | 8.361 2234 | 8.366 6864 | 8.372 0816 | 8.377 4105 | 8.382 6748 | 8.387 8760 | 1  |
| 60 | 8.361 3150 | 8.366 7769 | 8.372 1710 | 8.377 4988 | 8.382 7620 | 8.387 9622 | 0  |
| "  | 41'        | 40'        | 39'        | 38'        | 37'        | 36'        | "  |



| "  | 18'        | 19'        | 20'        | 21'        | 22'        | 23'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.355 8953 | 8.361 4297 | 8.366 8945 | 8.372 2915 | 8.377 6223 | 8.382 8886 | 60 |
| 1  | 8.355 9881 | 8.361 5213 | 8.366 9850 | 8.372 3809 | 8.377 7106 | 8.382 9758 | 59 |
| 2  | 8.356 0809 | 8.361 6129 | 8.367 0755 | 8.372 4703 | 8.377 7989 | 8.383 0631 | 58 |
| 3  | 8.356 1737 | 8.361 7045 | 8.367 1660 | 8.372 5596 | 8.377 8872 | 8.383 1503 | 57 |
| 4  | 8.356 2664 | 8.361 7961 | 8.367 2564 | 8.372 6489 | 8.377 9754 | 8.383 2374 | 56 |
| 5  | 8.356 3592 | 8.361 8877 | 8.367 3468 | 8.372 7383 | 8.378 0636 | 8.383 3246 | 55 |
| 6  | 8.356 4519 | 8.361 9793 | 8.367 4372 | 8.372 8275 | 8.378 1519 | 8.383 4117 | 54 |
| 7  | 8.356 5446 | 8.362 0708 | 8.367 5276 | 8.372 9168 | 8.378 2400 | 8.383 4989 | 53 |
| 8  | 8.356 6373 | 8.362 1623 | 8.367 6180 | 8.373 0061 | 8.378 3282 | 8.383 5860 | 52 |
| 9  | 8.356 7299 | 8.362 2538 | 8.367 7083 | 8.373 0953 | 8.378 4164 | 8.383 6731 | 51 |
| 10 | 8.356 8226 | 8.362 3453 | 8.367 7987 | 8.373 1845 | 8.378 5045 | 8.383 7601 | 50 |
| 11 | 8.356 9152 | 8.362 4367 | 8.367 8890 | 8.373 2737 | 8.378 5926 | 8.383 8472 | 49 |
| 12 | 8.357 0078 | 8.362 5281 | 8.367 9793 | 8.373 3629 | 8.378 6807 | 8.383 9342 | 48 |
| 13 | 8.357 1004 | 8.362 6196 | 8.368 0696 | 8.373 4521 | 8.378 7688 | 8.384 0213 | 47 |
| 14 | 8.357 1929 | 8.362 7110 | 8.368 1598 | 8.373 5412 | 8.378 8569 | 8.384 1083 | 46 |
| 15 | 8.357 2855 | 8.362 8023 | 8.368 2501 | 8.373 6304 | 8.378 9449 | 8.384 1953 | 45 |
| 16 | 8.357 3780 | 8.362 8937 | 8.368 3403 | 8.373 7195 | 8.379 0329 | 8.384 2822 | 44 |
| 17 | 8.357 4705 | 8.362 9850 | 8.368 4305 | 8.373 8086 | 8.379 1209 | 8.384 3692 | 43 |
| 18 | 8.357 5630 | 8.363 0763 | 8.368 5207 | 8.373 8976 | 8.379 2089 | 8.384 4561 | 42 |
| 19 | 8.357 6555 | 8.363 1676 | 8.368 6108 | 8.373 9867 | 8.379 2969 | 8.384 5430 | 41 |
| 20 | 8.357 7479 | 8.363 2589 | 8.368 7010 | 8.374 0757 | 8.379 3849 | 8.384 6299 | 40 |
| 21 | 8.357 8403 | 8.363 3502 | 8.368 7911 | 8.374 1647 | 8.379 4728 | 8.384 7168 | 39 |
| 22 | 8.357 9327 | 8.363 4414 | 8.368 8812 | 8.374 2538 | 8.379 5607 | 8.384 8037 | 38 |
| 23 | 8.358 0251 | 8.363 5327 | 8.368 9713 | 8.374 3427 | 8.379 6486 | 8.384 8905 | 37 |
| 24 | 8.358 1175 | 8.363 6239 | 8.369 0614 | 8.374 4317 | 8.379 7365 | 8.384 9774 | 36 |
| 25 | 8.358 2098 | 8.363 7150 | 8.369 1514 | 8.374 5206 | 8.379 8244 | 8.385 0642 | 35 |
| 26 | 8.358 3022 | 8.363 8062 | 8.369 2414 | 8.374 6096 | 8.379 9122 | 8.385 1510 | 34 |
| 27 | 8.358 3945 | 8.363 8974 | 8.369 3315 | 8.374 6985 | 8.380 0001 | 8.385 2378 | 33 |
| 28 | 8.358 4868 | 8.363 9885 | 8.369 4215 | 8.374 7874 | 8.380 0879 | 8.385 3245 | 32 |
| 29 | 8.358 5790 | 8.364 0796 | 8.369 5114 | 8.374 8762 | 8.380 1757 | 8.385 4113 | 31 |
| 30 | 8.358 6713 | 8.364 1707 | 8.369 6014 | 8.374 9651 | 8.380 2634 | 8.385 4980 | 30 |
| 31 | 8.358 7635 | 8.364 2617 | 8.369 6913 | 8.375 0539 | 8.380 3512 | 8.385 5847 | 29 |
| 32 | 8.358 8557 | 8.364 3528 | 8.369 7812 | 8.375 1428 | 8.380 4390 | 8.385 6714 | 28 |
| 33 | 8.358 9479 | 8.364 4438 | 8.369 8712 | 8.375 2316 | 8.380 5267 | 8.385 7581 | 27 |
| 34 | 8.359 0401 | 8.364 5348 | 8.369 9610 | 8.375 3203 | 8.380 6144 | 8.385 8448 | 26 |
| 35 | 8.359 1322 | 8.364 6258 | 8.370 0509 | 8.375 4091 | 8.380 7021 | 8.385 9314 | 25 |
| 36 | 8.359 2243 | 8.364 7168 | 8.370 1407 | 8.375 4979 | 8.380 7898 | 8.386 0180 | 24 |
| 37 | 8.359 3165 | 8.364 8078 | 8.370 2306 | 8.375 5866 | 8.380 8774 | 8.386 1046 | 23 |
| 38 | 8.359 4086 | 8.364 8987 | 8.370 3204 | 8.375 6753 | 8.380 9650 | 8.386 1912 | 22 |
| 39 | 8.359 5006 | 8.364 9896 | 8.370 4102 | 8.375 7640 | 8.381 0527 | 8.386 2778 | 21 |
| 40 | 8.359 5927 | 8.365 0805 | 8.370 4999 | 8.375 8527 | 8.381 1403 | 8.386 3643 | 20 |
| 41 | 8.359 6847 | 8.365 1714 | 8.370 5897 | 8.375 9413 | 8.381 2278 | 8.386 4509 | 19 |
| 42 | 8.359 7767 | 8.365 2623 | 8.370 6794 | 8.376 0299 | 8.381 3154 | 8.386 5374 | 18 |
| 43 | 8.359 8687 | 8.365 3531 | 8.370 7692 | 8.376 1186 | 8.381 4030 | 8.386 6239 | 17 |
| 44 | 8.359 9607 | 8.365 4439 | 8.370 8589 | 8.376 2072 | 8.381 4905 | 8.386 7104 | 16 |
| 45 | 8.360 0527 | 8.365 5347 | 8.370 9485 | 8.376 2958 | 8.381 5780 | 8.386 7969 | 15 |
| 46 | 8.360 1446 | 8.365 6255 | 8.371 0382 | 8.376 3843 | 8.381 6655 | 8.386 8833 | 14 |
| 47 | 8.360 2365 | 8.365 7163 | 8.371 1278 | 8.376 4729 | 8.381 7530 | 8.386 9698 | 13 |
| 48 | 8.360 3284 | 8.365 8070 | 8.371 2175 | 8.376 5614 | 8.381 8404 | 8.387 0562 | 12 |
| 49 | 8.360 4203 | 8.365 8978 | 8.371 3071 | 8.376 6499 | 8.381 9279 | 8.387 1426 | 11 |
| 50 | 8.360 5121 | 8.365 9885 | 8.371 3967 | 8.376 7384 | 8.382 0153 | 8.387 2290 | 10 |
| 51 | 8.360 6040 | 8.366 0792 | 8.371 4862 | 8.376 8269 | 8.382 1027 | 8.387 3153 | 9  |
| 52 | 8.360 6958 | 8.366 1698 | 8.371 5758 | 8.376 9153 | 8.382 1901 | 8.387 4017 | 8  |
| 53 | 8.360 7876 | 8.366 2605 | 8.371 6653 | 8.377 0038 | 8.382 2775 | 8.387 4880 | 7  |
| 54 | 8.360 8794 | 8.366 3511 | 8.371 7548 | 8.377 0922 | 8.382 3648 | 8.387 5743 | 6  |
| 55 | 8.360 9711 | 8.366 4417 | 8.371 8443 | 8.377 1806 | 8.382 4522 | 8.387 6606 | 5  |
| 56 | 8.361 0629 | 8.366 5323 | 8.371 9338 | 8.377 2690 | 8.382 5395 | 8.387 7469 | 4  |
| 57 | 8.361 1546 | 8.366 6229 | 8.372 0232 | 8.377 3574 | 8.382 6268 | 8.387 8332 | 3  |
| 58 | 8.361 2463 | 8.366 7135 | 8.372 1127 | 8.377 4457 | 8.382 7141 | 8.387 9194 | 2  |
| 59 | 8.361 3380 | 8.366 8040 | 8.372 2021 | 8.377 5340 | 8.382 8014 | 8.388 0056 | 1  |
| 60 | 8.361 4297 | 8.366 8945 | 8.372 2915 | 8.377 6223 | 8.382 8886 | 8.388 0918 | 0  |
| "  | 41'        | 40'        | 39'        | 38'        | 37'        | 36'        | "  |



| "  | 24'        | 25'        | 26         | 27'        | 28'        | 29'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.387 9622 | 8.393 1008 | 8.398 1793 | 8.403 1990 | 8.408 1614 | 8.413 0676 | 60 |
| 1  | 8.388 0483 | 8.393 1859 | 8.398 2634 | 8.403 2822 | 8.408 2436 | 8.413 1489 | 59 |
| 2  | 8.388 1345 | 8.393 2710 | 8.398 3475 | 8.403 3653 | 8.408 3258 | 8.413 2302 | 58 |
| 3  | 8.388 2206 | 8.393 3561 | 8.398 4316 | 8.403 4485 | 8.408 4080 | 8.413 3115 | 57 |
| 4  | 8.388 3067 | 8.393 4412 | 8.398 5157 | 8.403 5316 | 8.408 4902 | 8.413 3927 | 56 |
| 5  | 8.388 3927 | 8.393 5263 | 8.398 5998 | 8.403 6147 | 8.408 5723 | 8.413 4740 | 55 |
| 6  | 8.388 4788 | 8.393 6113 | 8.398 6839 | 8.403 6978 | 8.408 6545 | 8.413 5552 | 54 |
| 7  | 8.388 5648 | 8.393 6964 | 8.398 7679 | 8.403 7809 | 8.408 7366 | 8.413 6364 | 53 |
| 8  | 8.388 6509 | 8.393 7814 | 8.398 8519 | 8.403 8639 | 8.408 8187 | 8.413 7176 | 52 |
| 9  | 8.388 7369 | 8.393 8664 | 8.398 9359 | 8.403 9470 | 8.408 9008 | 8.413 7988 | 51 |
| 10 | 8.388 8229 | 8.393 9513 | 8.399 0199 | 8.404 0300 | 8.408 9829 | 8.413 8800 | 50 |
| 11 | 8.388 9088 | 8.394 0363 | 8.399 1039 | 8.404 1130 | 8.409 0650 | 8.413 9611 | 49 |
| 12 | 8.388 9948 | 8.394 1213 | 8.399 1879 | 8.404 1960 | 8.409 1471 | 8.414 0422 | 48 |
| 13 | 8.389 0807 | 8.394 2062 | 8.399 2718 | 8.404 2790 | 8.409 2291 | 8.414 1234 | 47 |
| 14 | 8.389 1666 | 8.394 2911 | 8.399 3557 | 8.404 3620 | 8.409 3111 | 8.414 2045 | 46 |
| 15 | 8.389 2526 | 8.394 3760 | 8.399 4397 | 8.404 4449 | 8.409 3931 | 8.414 2856 | 45 |
| 16 | 8.389 3384 | 8.394 4609 | 8.399 5236 | 8.404 5279 | 8.409 4751 | 8.414 3666 | 44 |
| 17 | 8.389 4243 | 8.394 5457 | 8.399 6074 | 8.404 6108 | 8.409 5571 | 8.414 4477 | 43 |
| 18 | 8.389 5102 | 8.394 6306 | 8.399 6913 | 8.404 6937 | 8.409 6391 | 8.414 5287 | 42 |
| 19 | 8.389 5960 | 8.394 7154 | 8.399 7751 | 8.404 7766 | 8.409 7210 | 8.414 6098 | 41 |
| 20 | 8.389 6818 | 8.394 8002 | 8.399 8590 | 8.404 8594 | 8.409 8029 | 8.414 6908 | 40 |
| 21 | 8.389 7676 | 8.394 8850 | 8.399 9428 | 8.404 9423 | 8.409 8849 | 8.414 7718 | 39 |
| 22 | 8.389 8534 | 8.394 9698 | 8.400 0266 | 8.405 0251 | 8.409 9668 | 8.414 8528 | 38 |
| 23 | 8.389 9392 | 8.395 0546 | 8.400 1104 | 8.405 1080 | 8.410 0486 | 8.414 9337 | 37 |
| 24 | 8.390 0249 | 8.395 1393 | 8.400 1941 | 8.405 1908 | 8.410 1305 | 8.415 0147 | 36 |
| 25 | 8.390 1107 | 8.395 2240 | 8.400 2779 | 8.405 2736 | 8.410 2124 | 8.415 0956 | 35 |
| 26 | 8.390 1964 | 8.395 3088 | 8.400 3616 | 8.405 3563 | 8.410 2942 | 8.415 1765 | 34 |
| 27 | 8.390 2821 | 8.395 3935 | 8.400 4453 | 8.405 4391 | 8.410 3760 | 8.415 2575 | 33 |
| 28 | 8.390 3678 | 8.395 4781 | 8.400 5290 | 8.405 5218 | 8.410 4578 | 8.415 3383 | 32 |
| 29 | 8.390 4534 | 8.395 5628 | 8.400 6127 | 8.405 6046 | 8.410 5396 | 8.415 4192 | 31 |
| 30 | 8.390 5391 | 8.395 6475 | 8.400 6964 | 8.405 6873 | 8.410 6214 | 8.415 5001 | 30 |
| 31 | 8.390 6247 | 8.395 7321 | 8.400 7801 | 8.405 7700 | 8.410 7032 | 8.415 5809 | 29 |
| 32 | 8.390 7103 | 8.395 8167 | 8.400 8637 | 8.405 8527 | 8.410 7849 | 8.415 6618 | 28 |
| 33 | 8.390 7959 | 8.395 9013 | 8.400 9473 | 8.405 9353 | 8.410 8667 | 8.415 7426 | 27 |
| 34 | 8.390 8815 | 8.395 9859 | 8.401 0309 | 8.406 0180 | 8.410 9484 | 8.415 8234 | 26 |
| 35 | 8.390 9671 | 8.396 0705 | 8.401 1145 | 8.406 1006 | 8.411 0301 | 8.415 9042 | 25 |
| 36 | 8.391 0526 | 8.396 1550 | 8.401 1981 | 8.406 1832 | 8.411 1118 | 8.415 9850 | 24 |
| 37 | 8.391 1382 | 8.396 2395 | 8.401 2816 | 8.406 2658 | 8.411 1934 | 8.416 0657 | 23 |
| 38 | 8.391 2237 | 8.396 3241 | 8.401 3652 | 8.406 3484 | 8.411 2751 | 8.416 1465 | 22 |
| 39 | 8.391 3092 | 8.396 4086 | 8.401 4487 | 8.406 4310 | 8.411 3567 | 8.416 2272 | 21 |
| 40 | 8.391 3947 | 8.396 4930 | 8.401 5322 | 8.406 5135 | 8.411 4383 | 8.416 3079 | 20 |
| 41 | 8.391 4801 | 8.396 5775 | 8.401 6157 | 8.406 5961 | 8.411 5200 | 8.416 3886 | 19 |
| 42 | 8.391 5656 | 8.396 6620 | 8.401 6992 | 8.406 6786 | 8.411 6015 | 8.416 4693 | 18 |
| 43 | 8.391 6510 | 8.396 7464 | 8.401 7826 | 8.406 7611 | 8.411 6831 | 8.416 5499 | 17 |
| 44 | 8.391 7364 | 8.396 8308 | 8.401 8661 | 8.406 8436 | 8.411 7647 | 8.416 6306 | 16 |
| 45 | 8.391 8218 | 8.396 9152 | 8.401 9495 | 8.406 9261 | 8.411 8462 | 8.416 7112 | 15 |
| 46 | 8.391 9072 | 8.396 9996 | 8.402 0329 | 8.407 0085 | 8.411 9278 | 8.416 7919 | 14 |
| 47 | 8.391 9926 | 8.397 0840 | 8.402 1163 | 8.407 0910 | 8.412 0093 | 8.416 8725 | 13 |
| 48 | 8.392 0779 | 8.397 1683 | 8.402 1997 | 8.407 1734 | 8.412 0908 | 8.416 9531 | 12 |
| 49 | 8.392 1633 | 8.397 2527 | 8.402 2831 | 8.407 2558 | 8.412 1723 | 8.417 0336 | 11 |
| 50 | 8.392 2486 | 8.397 3370 | 8.402 3664 | 8.407 3382 | 8.412 2537 | 8.417 1142 | 10 |
| 51 | 8.392 3339 | 8.397 4213 | 8.402 4497 | 8.407 4206 | 8.412 3352 | 8.417 1948 | 9  |
| 52 | 8.392 4191 | 8.397 5056 | 8.402 5331 | 8.407 5030 | 8.412 4166 | 8.417 2753 | 8  |
| 53 | 8.392 5044 | 8.397 5898 | 8.402 6164 | 8.407 5853 | 8.412 4981 | 8.417 3558 | 7  |
| 54 | 8.392 5897 | 8.397 6741 | 8.402 6996 | 8.407 6677 | 8.412 5795 | 8.417 4363 | 6  |
| 55 | 8.392 6749 | 8.397 7583 | 8.402 7829 | 8.407 7500 | 8.412 6609 | 8.417 5168 | 5  |
| 56 | 8.392 7601 | 8.397 8425 | 8.402 8662 | 8.407 8323 | 8.412 7422 | 8.417 5973 | 4  |
|    | 8.392 8453 | 8.397 9268 | 8.402 9494 | 8.407 9146 | 8.412 8236 | 8.417 6777 | 3  |
|    | 8.392 9305 | 8.398 0109 | 8.403 0326 | 8.407 9969 | 8.412 9050 | 8.417 7582 | 2  |
|    | 8.393 0156 | 8.398 0951 | 8.403 1158 | 8.408 0791 | 8.412 9863 | 8.417 8386 | 1  |
|    | 8.393 1008 | 8.398 1793 | 8.403 1990 | 8.408 1614 | 8.413 0676 | 8.417 9190 | 0  |
|    | 35'        | 34'        | 33'        | 32'        | 31'        | 30'        | "  |

cos 88°



| "  | 24'        | 25'        | 26'        | 27'        | 28'        | 29'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.388 0918 | 8.393 2336 | 8.398 3152 | 8.403 3381 | 8.408 3037 | 8.413 2132 | 60 |
| 1  | 8.388 1780 | 8.393 3187 | 8.398 3994 | 8.403 4213 | 8.408 3859 | 8.413 2945 | 59 |
| 2  | 8.388 2642 | 8.393 4039 | 8.398 4835 | 8.403 5045 | 8.408 4682 | 8.413 3759 | 58 |
| 3  | 8.388 3504 | 8.393 4891 | 8.398 5677 | 8.403 5877 | 8.408 5505 | 8.413 4572 | 57 |
| 4  | 8.388 4365 | 8.393 5742 | 8.398 6519 | 8.403 6709 | 8.408 6327 | 8.413 5385 | 56 |
| 5  | 8.388 5227 | 8.393 6593 | 8.398 7360 | 8.403 7541 | 8.408 7149 | 8.413 6198 | 55 |
| 6  | 8.388 6088 | 8.393 7444 | 8.398 8201 | 8.403 8372 | 8.408 7971 | 8.413 7011 | 54 |
| 7  | 8.388 6949 | 8.393 8295 | 8.398 9042 | 8.403 9203 | 8.408 8793 | 8.413 7823 | 53 |
| 8  | 8.388 7809 | 8.393 9145 | 8.398 9883 | 8.404 0035 | 8.408 9615 | 8.413 8636 | 52 |
| 9  | 8.388 8670 | 8.393 9996 | 8.399 0723 | 8.404 0866 | 8.409 0436 | 8.413 9448 | 51 |
| 10 | 8.388 9530 | 8.394 0846 | 8.399 1564 | 8.404 1696 | 8.409 1258 | 8.414 0261 | 50 |
| 11 | 8.389 0391 | 8.394 1696 | 8.399 2404 | 8.404 2527 | 8.409 2079 | 8.414 1073 | 49 |
| 12 | 8.389 1251 | 8.394 2546 | 8.399 3244 | 8.404 3358 | 8.409 2900 | 8.414 1885 | 48 |
| 13 | 8.389 2111 | 8.394 3396 | 8.399 4084 | 8.404 4188 | 8.409 3721 | 8.414 2696 | 47 |
| 14 | 8.389 2970 | 8.394 4246 | 8.399 4924 | 8.404 5018 | 8.409 4542 | 8.414 3508 | 46 |
| 15 | 8.389 3830 | 8.394 5095 | 8.399 5764 | 8.404 5848 | 8.409 5362 | 8.414 4319 | 45 |
| 16 | 8.389 4689 | 8.394 5945 | 8.399 6603 | 8.404 6678 | 8.409 6183 | 8.414 5131 | 44 |
| 17 | 8.389 5548 | 8.394 6794 | 8.399 7442 | 8.404 7508 | 8.409 7003 | 8.414 5942 | 43 |
| 18 | 8.389 6408 | 8.394 7643 | 8.399 8282 | 8.404 8337 | 8.409 7823 | 8.414 6753 | 42 |
| 19 | 8.389 7266 | 8.394 8492 | 8.399 9121 | 8.404 9167 | 8.409 8643 | 8.414 7564 | 41 |
| 20 | 8.389 8125 | 8.394 9340 | 8.399 9959 | 8.404 9996 | 8.409 9463 | 8.414 8374 | 40 |
| 21 | 8.389 8984 | 8.395 0189 | 8.400 0798 | 8.405 0825 | 8.410 0283 | 8.414 9185 | 39 |
| 22 | 8.389 9842 | 8.395 1037 | 8.400 1637 | 8.405 1654 | 8.410 1103 | 8.414 9995 | 38 |
| 23 | 8.390 0700 | 8.395 1885 | 8.400 2475 | 8.405 2483 | 8.410 1922 | 8.415 0805 | 37 |
| 24 | 8.390 1558 | 8.395 2733 | 8.400 3313 | 8.405 3311 | 8.410 2741 | 8.415 1616 | 36 |
| 25 | 8.390 2416 | 8.395 3581 | 8.400 4151 | 8.405 4140 | 8.410 3560 | 8.415 2425 | 35 |
| 26 | 8.390 3274 | 8.395 4429 | 8.400 4989 | 8.405 4968 | 8.410 4379 | 8.415 3235 | 34 |
| 27 | 8.390 4131 | 8.395 5276 | 8.400 5827 | 8.405 5796 | 8.410 5198 | 8.415 4045 | 33 |
| 28 | 8.390 4989 | 8.395 6124 | 8.400 6664 | 8.405 6624 | 8.410 6017 | 8.415 4854 | 32 |
| 29 | 8.390 5846 | 8.395 6971 | 8.400 7502 | 8.405 7452 | 8.410 6835 | 8.415 5664 | 31 |
| 30 | 8.390 6703 | 8.395 7818 | 8.400 8339 | 8.405 8280 | 8.410 7653 | 8.415 6473 | 30 |
| 31 | 8.390 7560 | 8.395 8665 | 8.400 9176 | 8.405 9107 | 8.410 8472 | 8.415 7282 | 29 |
| 32 | 8.390 8417 | 8.395 9511 | 8.401 0013 | 8.405 9935 | 8.410 9290 | 8.415 8091 | 28 |
| 33 | 8.390 9273 | 8.396 0358 | 8.401 0850 | 8.406 0762 | 8.411 0107 | 8.415 8900 | 27 |
| 34 | 8.391 0129 | 8.396 1204 | 8.401 1686 | 8.406 1589 | 8.411 0925 | 8.415 9708 | 26 |
| 35 | 8.391 0986 | 8.396 2050 | 8.401 2523 | 8.406 2416 | 8.411 1743 | 8.416 0517 | 25 |
| 36 | 8.391 1842 | 8.396 2897 | 8.401 3359 | 8.406 3242 | 8.411 2560 | 8.416 1325 | 24 |
| 37 | 8.391 2697 | 8.396 3742 | 8.401 4195 | 8.406 4069 | 8.411 3377 | 8.416 2133 | 23 |
| 38 | 8.391 3553 | 8.396 4588 | 8.401 5031 | 8.406 4895 | 8.411 4194 | 8.416 2941 | 22 |
| 39 | 8.391 4409 | 8.396 5434 | 8.401 5867 | 8.406 5722 | 8.411 5011 | 8.416 3749 | 21 |
| 40 | 8.391 5264 | 8.396 6279 | 8.401 6702 | 8.406 6548 | 8.411 5828 | 8.416 4556 | 20 |
| 41 | 8.391 6119 | 8.396 7124 | 8.401 7538 | 8.406 7374 | 8.411 6645 | 8.416 5364 | 19 |
| 42 | 8.391 6974 | 8.396 7969 | 8.401 8373 | 8.406 8199 | 8.411 7461 | 8.416 6171 | 18 |
| 43 | 8.391 7829 | 8.396 8814 | 8.401 9208 | 8.406 9025 | 8.411 8278 | 8.416 6979 | 17 |
| 44 | 8.391 8684 | 8.396 9659 | 8.402 0043 | 8.406 9850 | 8.411 9094 | 8.416 7786 | 16 |
| 45 | 8.391 9538 | 8.397 0503 | 8.402 0878 | 8.407 0676 | 8.411 9910 | 8.416 8593 | 15 |
| 46 | 8.392 0393 | 8.397 1348 | 8.402 1713 | 8.407 1501 | 8.412 0726 | 8.416 9399 | 14 |
| 47 | 8.392 1247 | 8.397 2192 | 8.402 2547 | 8.407 2326 | 8.412 1541 | 8.417 0206 | 13 |
| 48 | 8.392 2101 | 8.397 3036 | 8.402 3381 | 8.407 3151 | 8.412 2357 | 8.417 1012 | 12 |
| 49 | 8.392 2955 | 8.397 3880 | 8.402 4216 | 8.407 3975 | 8.412 3172 | 8.417 1819 | 11 |
| 50 | 8.392 3808 | 8.397 4724 | 8.402 5050 | 8.407 4800 | 8.412 3988 | 8.417 2625 | 10 |
| 51 | 8.392 4662 | 8.397 5567 | 8.402 5884 | 8.407 5624 | 8.412 4803 | 8.417 3431 | 9  |
| 52 | 8.392 5515 | 8.397 6411 | 8.402 6717 | 8.407 6449 | 8.412 5618 | 8.417 4237 | 8  |
| 53 | 8.392 6368 | 8.397 7254 | 8.402 7551 | 8.407 7273 | 8.412 6432 | 8.417 5043 | 7  |
| 54 | 8.392 7221 | 8.397 8097 | 8.402 8384 | 8.407 8097 | 8.412 7247 | 8.417 5848 | 6  |
| 55 | 8.392 8074 | 8.397 8940 | 8.402 9217 | 8.407 8920 | 8.412 8062 | 8.417 6654 | 5  |
| 56 | 8.392 8927 | 8.397 9782 | 8.403 0050 | 8.407 9744 | 8.412 8876 | 8.417 7459 | 4  |
| 57 | 8.392 9779 | 8.398 0625 | 8.403 0883 | 8.408 0567 | 8.412 9690 | 8.417 8264 | 3  |
| 58 | 8.393 0631 | 8.398 1467 | 8.403 1716 | 8.408 1391 | 8.413 0504 | 8.417 9069 | 2  |
| 59 | 8.393 1484 | 8.398 2310 | 8.403 2549 | 8.408 2214 | 8.413 1318 | 8.417 9874 | 1  |
| 60 | 8.393 2336 | 8.398 3152 | 8.403 3381 | 8.408 3037 | 8.413 2132 | 8.418 0679 | 0  |
| "  | 35'        | 34'        | 33'        | 32'        | 31'        | 30'        | "  |



| "  | 30'        | 31'        | 32'        | 33'        | 34'        | 35'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.417 9190 | 8.422 7168 | 8.427 4621 | 8.432 1561 | 8.436 7999 | 8.441 3944 | 60 |
| 1  | 8.417 9994 | 8.422 7963 | 8.427 5408 | 8.432 2339 | 8.436 8768 | 8.441 4706 | 59 |
| 2  | 8.418 0798 | 8.422 8758 | 8.427 6194 | 8.432 3117 | 8.436 9538 | 8.441 5468 | 58 |
| 3  | 8.418 1602 | 8.422 9553 | 8.427 6980 | 8.432 3895 | 8.437 0307 | 8.441 6229 | 57 |
| 4  | 8.418 2405 | 8.423 0348 | 8.427 7766 | 8.432 4672 | 8.437 1077 | 8.441 6990 | 56 |
| 5  | 8.418 3209 | 8.423 1142 | 8.427 8552 | 8.432 5450 | 8.437 1846 | 8.441 7751 | 55 |
| 6  | 8.418 4012 | 8.423 1937 | 8.427 9338 | 8.432 6227 | 8.437 2615 | 8.441 8512 | 54 |
| 7  | 8.418 4815 | 8.423 2731 | 8.428 0124 | 8.432 7004 | 8.437 3384 | 8.441 9273 | 53 |
| 8  | 8.418 5618 | 8.423 3525 | 8.428 0909 | 8.432 7781 | 8.437 4153 | 8.442 0034 | 52 |
| 9  | 8.418 6421 | 8.423 4319 | 8.428 1694 | 8.432 8558 | 8.437 4921 | 8.442 0795 | 51 |
| 10 | 8.418 7223 | 8.423 5113 | 8.428 2480 | 8.432 9335 | 8.437 5690 | 8.442 1555 | 50 |
| 11 | 8.418 8026 | 8.423 5907 | 8.428 3265 | 8.433 0112 | 8.437 6458 | 8.442 2315 | 49 |
| 12 | 8.418 8828 | 8.423 6700 | 8.428 4050 | 8.433 0888 | 8.437 7227 | 8.442 3076 | 48 |
| 13 | 8.418 9630 | 8.423 7494 | 8.428 4835 | 8.433 1665 | 8.437 7995 | 8.442 3836 | 47 |
| 14 | 8.419 0432 | 8.423 8287 | 8.428 5619 | 8.433 2441 | 8.437 8763 | 8.442 4596 | 46 |
| 15 | 8.419 1234 | 8.423 9080 | 8.428 6404 | 8.433 3217 | 8.437 9531 | 8.442 5355 | 45 |
| 16 | 8.419 2036 | 8.423 9873 | 8.428 7188 | 8.433 3993 | 8.438 0298 | 8.442 6115 | 44 |
| 17 | 8.419 2838 | 8.424 0666 | 8.428 7972 | 8.433 4769 | 8.438 1066 | 8.442 6875 | 43 |
| 18 | 8.419 3639 | 8.424 1458 | 8.428 8756 | 8.433 5544 | 8.438 1833 | 8.442 7634 | 42 |
| 19 | 8.419 4441 | 8.424 2251 | 8.428 9540 | 8.433 6320 | 8.438 2601 | 8.442 8393 | 41 |
| 20 | 8.419 5242 | 8.424 3043 | 8.429 0324 | 8.433 7095 | 8.438 3368 | 8.442 9152 | 40 |
| 21 | 8.419 6043 | 8.424 3836 | 8.429 1108 | 8.433 7871 | 8.438 4135 | 8.442 9911 | 39 |
| 22 | 8.419 6844 | 8.424 4628 | 8.429 1891 | 8.433 8646 | 8.438 4902 | 8.443 0670 | 38 |
| 23 | 8.419 7644 | 8.424 5420 | 8.429 2675 | 8.433 9421 | 8.438 5669 | 8.443 1429 | 37 |
| 24 | 8.419 8445 | 8.424 6211 | 8.429 3458 | 8.434 0196 | 8.438 6435 | 8.443 2187 | 36 |
| 25 | 8.419 9245 | 8.424 7003 | 8.429 4241 | 8.434 0970 | 8.438 7202 | 8.443 2946 | 35 |
| 26 | 8.420 0046 | 8.424 7795 | 8.429 5024 | 8.434 1745 | 8.438 7968 | 8.443 3704 | 34 |
| 27 | 8.420 0846 | 8.424 8586 | 8.429 5807 | 8.434 2519 | 8.438 8734 | 8.443 4462 | 33 |
| 28 | 8.420 1646 | 8.424 9377 | 8.429 6590 | 8.434 3294 | 8.438 9501 | 8.443 5221 | 32 |
| 29 | 8.420 2446 | 8.425 0168 | 8.429 7372 | 8.434 4068 | 8.439 0266 | 8.443 5978 | 31 |
| 30 | 8.420 3245 | 8.425 0959 | 8.429 8154 | 8.434 4842 | 8.439 1032 | 8.443 6736 | 30 |
| 31 | 8.420 4045 | 8.425 1750 | 8.429 8937 | 8.434 5616 | 8.439 1798 | 8.443 7494 | 29 |
| 32 | 8.420 4844 | 8.425 2541 | 8.429 9719 | 8.434 6389 | 8.439 2564 | 8.443 8251 | 28 |
| 33 | 8.420 5644 | 8.425 3331 | 8.430 0501 | 8.434 7163 | 8.439 3329 | 8.443 9009 | 27 |
| 34 | 8.420 6443 | 8.425 4122 | 8.430 1283 | 8.434 7937 | 8.439 4094 | 8.443 9766 | 26 |
| 35 | 8.420 7242 | 8.425 4912 | 8.430 2064 | 8.434 8710 | 8.439 4859 | 8.444 0523 | 25 |
| 36 | 8.420 8040 | 8.425 5702 | 8.430 2846 | 8.434 9483 | 8.439 5624 | 8.444 1280 | 24 |
| 37 | 8.420 8839 | 8.425 6492 | 8.430 3627 | 8.435 0256 | 8.439 6389 | 8.444 2037 | 23 |
| 38 | 8.420 9638 | 8.425 7282 | 8.430 4409 | 8.435 1029 | 8.439 7154 | 8.444 2794 | 22 |
| 39 | 8.421 0436 | 8.425 8071 | 8.430 5190 | 8.435 1802 | 8.439 7919 | 8.444 3551 | 21 |
| 40 | 8.421 1234 | 8.425 8861 | 8.430 5971 | 8.435 2574 | 8.439 8683 | 8.444 4307 | 20 |
| 41 | 8.421 2032 | 8.425 9650 | 8.430 6751 | 8.435 3347 | 8.439 9447 | 8.444 5063 | 19 |
| 42 | 8.421 2830 | 8.426 0439 | 8.430 7532 | 8.435 4119 | 8.440 0212 | 8.444 5820 | 18 |
| 43 | 8.421 3628 | 8.426 1229 | 8.430 8313 | 8.435 4892 | 8.440 0976 | 8.444 6576 | 17 |
| 44 | 8.421 4426 | 8.426 2018 | 8.430 9093 | 8.435 5664 | 8.440 1740 | 8.444 7332 | 16 |
| 45 | 8.421 5223 | 8.426 2806 | 8.430 9873 | 8.435 6436 | 8.440 2503 | 8.444 8087 | 15 |
| 46 | 8.421 6020 | 8.426 3595 | 8.431 0654 | 8.435 7207 | 8.440 3267 | 8.444 8843 | 14 |
| 47 | 8.421 6818 | 8.426 4383 | 8.431 1434 | 8.435 7979 | 8.440 4031 | 8.444 9599 | 13 |
| 48 | 8.421 7615 | 8.426 5172 | 8.431 2213 | 8.435 8751 | 8.440 4794 | 8.445 0354 | 12 |
| 49 | 8.421 8412 | 8.426 5960 | 8.431 2993 | 8.435 9522 | 8.440 5557 | 8.445 1109 | 11 |
| 50 | 8.421 9208 | 8.426 6748 | 8.431 3773 | 8.436 0293 | 8.440 6321 | 8.445 1865 | 10 |
| 51 | 8.422 0005 | 8.426 7536 | 8.431 4552 | 8.436 1064 | 8.440 7083 | 8.445 2620 | 9  |
| 52 | 8.422 0801 | 8.426 8324 | 8.431 5332 | 8.436 1835 | 8.440 7846 | 8.445 3375 | 8  |
| 53 | 8.422 1598 | 8.426 9111 | 8.431 6111 | 8.436 2606 | 8.440 8609 | 8.445 4129 | 7  |
| 54 | 8.422 2394 | 8.426 9899 | 8.431 6890 | 8.436 3377 | 8.440 9372 | 8.445 4884 | 6  |
| 55 | 8.422 3190 | 8.427 0686 | 8.431 7669 | 8.436 4148 | 8.441 0134 | 8.445 5638 | 5  |
| 56 | 8.422 3986 | 8.427 1474 | 8.431 8447 | 8.436 4918 | 8.441 0896 | 8.445 6393 | 4  |
| 57 | 8.422 4782 | 8.427 2261 | 8.431 9226 | 8.436 5688 | 8.441 1659 | 8.445 7147 | 3  |
| 58 | 8.422 5577 | 8.427 3048 | 8.432 0004 | 8.436 6459 | 8.441 2421 | 8.445 7901 | 2  |
| 59 | 8.422 6373 | 8.427 3834 | 8.432 0783 | 8.436 7229 | 8.441 3183 | 8.445 8655 | 1  |
| 60 | 8.422 7168 | 8.427 4621 | 8.432 1561 | 8.436 7999 | 8.441 3944 | 8.445 9409 | 0  |
| "  | 29'        | 28'        | 27'        | 26'        | 25'        | 24'        | "  |



| "  | 30'        | 31'        | 32'        | 33'        | 34'        | 35'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.418 0679 | 8.422 8690 | 8.427 6176 | 8.432 3150 | 8.436 9622 | 8.441 5603 | 60 |
| 1  | 8.418 1483 | 8.422 9485 | 8.427 6963 | 8.432 3929 | 8.437 0393 | 8.441 6365 | 59 |
| 2  | 8.418 2288 | 8.423 0281 | 8.427 7750 | 8.432 4707 | 8.437 1163 | 8.441 7127 | 58 |
| 3  | 8.418 3092 | 8.423 1076 | 8.427 8537 | 8.432 5486 | 8.437 1933 | 8.441 7889 | 57 |
| 4  | 8.418 3896 | 8.423 1872 | 8.427 9324 | 8.432 6264 | 8.437 2703 | 8.441 8651 | 56 |
| 5  | 8.418 4700 | 8.423 2667 | 8.428 0110 | 8.432 7042 | 8.437 3473 | 8.441 9413 | 55 |
| 6  | 8.418 5504 | 8.423 3462 | 8.428 0897 | 8.432 7820 | 8.437 4242 | 8.442 0174 | 54 |
| 7  | 8.418 6307 | 8.423 4257 | 8.428 1683 | 8.432 8598 | 8.437 5012 | 8.442 0936 | 53 |
| 8  | 8.418 7111 | 8.423 5051 | 8.428 2469 | 8.432 9375 | 8.437 5781 | 8.442 1697 | 52 |
| 9  | 8.418 7914 | 8.423 5846 | 8.428 3255 | 8.433 0153 | 8.437 6550 | 8.442 2458 | 51 |
| 10 | 8.418 8717 | 8.423 6640 | 8.428 4041 | 8.433 0930 | 8.437 7320 | 8.442 3219 | 50 |
| 11 | 8.418 9520 | 8.423 7434 | 8.428 4826 | 8.433 1707 | 8.437 8089 | 8.442 3980 | 49 |
| 12 | 8.419 0323 | 8.423 8229 | 8.428 5612 | 8.433 2484 | 8.437 8857 | 8.442 4741 | 48 |
| 13 | 8.419 1126 | 8.423 9023 | 8.428 6397 | 8.433 3261 | 8.437 9626 | 8.442 5502 | 47 |
| 14 | 8.419 1929 | 8.423 9816 | 8.428 7182 | 8.433 4038 | 8.438 0395 | 8.442 6262 | 46 |
| 15 | 8.419 2731 | 8.424 0610 | 8.428 7968 | 8.433 4815 | 8.438 1163 | 8.442 7023 | 45 |
| 16 | 8.419 3533 | 8.424 1404 | 8.428 8752 | 8.433 5591 | 8.438 1931 | 8.442 7783 | 44 |
| 17 | 8.419 4336 | 8.424 2197 | 8.428 9537 | 8.433 6368 | 8.438 2700 | 8.442 8543 | 43 |
| 18 | 8.419 5138 | 8.424 2990 | 8.429 0322 | 8.433 7144 | 8.438 3468 | 8.442 9303 | 42 |
| 19 | 8.419 5940 | 8.424 3783 | 8.429 1106 | 8.433 7920 | 8.438 4235 | 8.443 0063 | 41 |
| 20 | 8.419 6741 | 8.424 4576 | 8.429 1891 | 8.433 8696 | 8.438 5003 | 8.443 0822 | 40 |
| 21 | 8.419 7543 | 8.424 5369 | 8.429 2675 | 8.433 9472 | 8.438 5771 | 8.443 1582 | 39 |
| 22 | 8.419 8344 | 8.424 6162 | 8.429 3459 | 8.434 0248 | 8.438 6538 | 8.443 2341 | 38 |
| 23 | 8.419 9146 | 8.424 6954 | 8.429 4243 | 8.434 1023 | 8.438 7306 | 8.443 3101 | 37 |
| 24 | 8.419 9947 | 8.424 7747 | 8.429 5027 | 8.434 1799 | 8.438 8073 | 8.443 3860 | 36 |
| 25 | 8.420 0748 | 8.424 8539 | 8.429 5811 | 8.434 2574 | 8.438 8840 | 8.443 4619 | 35 |
| 26 | 8.420 1549 | 8.424 9331 | 8.429 6594 | 8.434 3349 | 8.438 9607 | 8.443 5378 | 34 |
| 27 | 8.420 2349 | 8.425 0123 | 8.429 7377 | 8.434 4124 | 8.439 0374 | 8.443 6137 | 33 |
| 28 | 8.420 3150 | 8.425 0915 | 8.429 8161 | 8.434 4899 | 8.439 1140 | 8.443 6895 | 32 |
| 29 | 8.420 3950 | 8.425 1706 | 8.429 8944 | 8.434 5674 | 8.439 1907 | 8.443 7654 | 31 |
| 30 | 8.420 4750 | 8.425 2498 | 8.429 9727 | 8.434 6448 | 8.439 2673 | 8.443 8412 | 30 |
| 31 | 8.420 5550 | 8.425 3289 | 8.430 0510 | 8.434 7223 | 8.439 3440 | 8.443 9171 | 29 |
| 32 | 8.420 6350 | 8.425 4080 | 8.430 1292 | 8.434 7997 | 8.439 4206 | 8.443 9929 | 28 |
| 33 | 8.420 7150 | 8.425 4872 | 8.430 2075 | 8.434 8771 | 8.439 4972 | 8.444 0687 | 27 |
| 34 | 8.420 7950 | 8.425 5662 | 8.430 2857 | 8.434 9545 | 8.439 5738 | 8.444 1444 | 26 |
| 35 | 8.420 8749 | 8.425 6453 | 8.430 3639 | 8.435 0319 | 8.439 6503 | 8.444 2202 | 25 |
| 36 | 8.420 9549 | 8.425 7244 | 8.430 4422 | 8.435 1093 | 8.439 7269 | 8.444 2960 | 24 |
| 37 | 8.421 0348 | 8.425 8034 | 8.430 5204 | 8.435 1867 | 8.439 8034 | 8.444 3717 | 23 |
| 38 | 8.421 1147 | 8.425 8825 | 8.430 5985 | 8.435 2640 | 8.439 8800 | 8.444 4475 | 22 |
| 39 | 8.421 1946 | 8.425 9615 | 8.430 6767 | 8.435 3413 | 8.439 9565 | 8.444 5232 | 21 |
| 40 | 8.421 2745 | 8.426 0405 | 8.430 7549 | 8.435 4187 | 8.440 0330 | 8.444 5989 | 20 |
| 41 | 8.421 3543 | 8.426 1195 | 8.430 8330 | 8.435 4960 | 8.440 1095 | 8.444 6746 | 19 |
| 42 | 8.421 4342 | 8.426 1985 | 8.430 9111 | 8.435 5733 | 8.440 1860 | 8.444 7503 | 18 |
| 43 | 8.421 5140 | 8.426 2774 | 8.430 9892 | 8.435 6506 | 8.440 2624 | 8.444 8259 | 17 |
| 44 | 8.421 5938 | 8.426 3564 | 8.431 0673 | 8.435 7278 | 8.440 3389 | 8.444 9016 | 16 |
| 45 | 8.421 6736 | 8.426 4353 | 8.431 1454 | 8.435 8051 | 8.440 4153 | 8.444 9772 | 15 |
| 46 | 8.421 7534 | 8.426 5142 | 8.431 2235 | 8.435 8823 | 8.440 4918 | 8.445 0529 | 14 |
| 47 | 8.421 8332 | 8.426 5932 | 8.431 3016 | 8.435 9595 | 8.440 5682 | 8.445 1285 | 13 |
| 48 | 8.421 9130 | 8.426 6720 | 8.431 3796 | 8.436 0368 | 8.440 6446 | 8.445 2041 | 12 |
| 49 | 8.421 9927 | 8.426 7509 | 8.431 4576 | 8.436 1139 | 8.440 7209 | 8.445 2797 | 11 |
| 50 | 8.422 0725 | 8.426 8298 | 8.431 5356 | 8.436 1911 | 8.440 7973 | 8.445 3552 | 10 |
| 51 | 8.422 1522 | 8.426 9086 | 8.431 6136 | 8.436 2683 | 8.440 8737 | 8.445 4308 | 9  |
| 52 | 8.422 2319 | 8.426 9875 | 8.431 6916 | 8.436 3455 | 8.440 9500 | 8.445 5063 | 8  |
| 53 | 8.422 3116 | 8.427 0663 | 8.431 7696 | 8.436 4226 | 8.441 0263 | 8.445 5819 | 7  |
| 54 | 8.422 3912 | 8.427 1451 | 8.431 8476 | 8.436 4997 | 8.441 1027 | 8.445 6574 | 6  |
| 55 | 8.422 4709 | 8.427 2239 | 8.431 9255 | 8.436 5769 | 8.441 1790 | 8.445 7329 | 5  |
| 56 | 8.422 5505 | 8.427 3027 | 8.432 0034 | 8.436 6540 | 8.441 2553 | 8.445 8084 | 4  |
| 57 | 8.422 6302 | 8.427 3814 | 8.432 0814 | 8.436 7310 | 8.441 3315 | 8.445 8839 | 3  |
| 58 | 8.422 7098 | 8.427 4602 | 8.432 1593 | 8.436 8081 | 8.441 4078 | 8.445 9594 | 2  |
| 59 | 8.422 7894 | 8.427 5389 | 8.432 2372 | 8.436 8852 | 8.441 4841 | 8.446 0348 | 1  |
| 60 | 8.422 8690 | 8.427 6176 | 8.432 3150 | 8.436 9622 | 8.441 5603 | 8.446 1103 | 0  |
| "  | 29'        | 28'        | 27'        | 26'        | 25'        | 24'        | "  |



| "  | 36'        | 37'        | 38'        | 39'        | 40'        | 41'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.445 9409 | 8.450 4402 | 8.454 8934 | 8.459 3013 | 8.463 6649 | 8.467 9850 | 60 |
| 1  | 8.446 0163 | 8.450 5148 | 8.454 9672 | 8.459 3744 | 8.463 7372 | 8.468 0567 | 59 |
| 2  | 8.446 0916 | 8.450 5894 | 8.455 0410 | 8.459 4474 | 8.463 8096 | 8.468 1283 | 58 |
| 3  | 8.446 1670 | 8.450 6640 | 8.455 1148 | 8.459 5205 | 8.463 8819 | 8.468 1999 | 57 |
| 4  | 8.446 2423 | 8.450 7385 | 8.455 1886 | 8.459 5936 | 8.463 9542 | 8.468 2715 | 56 |
| 5  | 8.446 3176 | 8.450 8131 | 8.455 2624 | 8.459 6666 | 8.464 0265 | 8.468 3431 | 55 |
| 6  | 8.446 3929 | 8.450 8876 | 8.455 3362 | 8.459 7396 | 8.464 0988 | 8.468 4147 | 54 |
| 7  | 8.446 4682 | 8.450 9621 | 8.455 4099 | 8.459 8126 | 8.464 1711 | 8.468 4862 | 53 |
| 8  | 8.446 5435 | 8.451 0366 | 8.455 4837 | 8.459 8856 | 8.464 2434 | 8.468 5578 | 52 |
| 9  | 8.446 6188 | 8.451 1111 | 8.455 5574 | 8.459 9586 | 8.464 3156 | 8.468 6293 | 51 |
| 10 | 8.446 6940 | 8.451 1856 | 8.455 6311 | 8.460 0316 | 8.464 3879 | 8.468 7009 | 50 |
| 11 | 8.446 7693 | 8.451 2601 | 8.455 7048 | 8.460 1046 | 8.464 4601 | 8.468 7724 | 49 |
| 12 | 8.446 8445 | 8.451 3345 | 8.455 7785 | 8.460 1775 | 8.464 5323 | 8.468 8439 | 48 |
| 13 | 8.446 9197 | 8.451 4090 | 8.455 8522 | 8.460 2505 | 8.464 6046 | 8.468 9154 | 47 |
| 14 | 8.446 9949 | 8.451 4834 | 8.455 9259 | 8.460 3234 | 8.464 6768 | 8.468 9869 | 46 |
| 15 | 8.447 0701 | 8.451 5578 | 8.455 9996 | 8.460 3963 | 8.464 7489 | 8.469 0584 | 45 |
| 16 | 8.447 1453 | 8.451 6322 | 8.456 0732 | 8.460 4692 | 8.464 8211 | 8.469 1298 | 44 |
| 17 | 8.447 2205 | 8.451 7066 | 8.456 1468 | 8.460 5421 | 8.464 8933 | 8.469 2013 | 43 |
| 18 | 8.447 2956 | 8.451 7810 | 8.456 2205 | 8.460 6150 | 8.464 9654 | 8.469 2727 | 42 |
| 19 | 8.447 3707 | 8.451 8553 | 8.456 2941 | 8.460 6878 | 8.465 0376 | 8.469 3441 | 41 |
| 20 | 8.447 4459 | 8.451 9297 | 8.456 3677 | 8.460 7607 | 8.465 1097 | 8.469 4156 | 40 |
| 21 | 8.447 5210 | 8.452 0040 | 8.456 4412 | 8.460 8335 | 8.465 1818 | 8.469 4870 | 39 |
| 22 | 8.447 5961 | 8.452 0784 | 8.456 5148 | 8.460 9064 | 8.465 2539 | 8.469 5583 | 38 |
| 23 | 8.447 6712 | 8.452 1527 | 8.456 5884 | 8.460 9792 | 8.465 3260 | 8.469 6297 | 37 |
| 24 | 8.447 7462 | 8.452 2270 | 8.456 6619 | 8.461 0520 | 8.465 3981 | 8.469 7011 | 36 |
| 25 | 8.447 8213 | 8.452 3013 | 8.456 7354 | 8.461 1248 | 8.465 4702 | 8.469 7725 | 35 |
| 26 | 8.447 8963 | 8.452 3755 | 8.456 8090 | 8.461 1976 | 8.465 5422 | 8.469 8438 | 34 |
| 27 | 8.447 9714 | 8.452 4498 | 8.456 8825 | 8.461 2703 | 8.465 6143 | 8.469 9151 | 33 |
| 28 | 8.448 0464 | 8.452 5240 | 8.456 9560 | 8.461 3431 | 8.465 6863 | 8.469 9865 | 32 |
| 29 | 8.448 1214 | 8.452 5983 | 8.457 0295 | 8.461 4158 | 8.465 7583 | 8.470 0578 | 31 |
| 30 | 8.448 1964 | 8.452 6725 | 8.457 1029 | 8.461 4886 | 8.465 8303 | 8.470 1291 | 30 |
| 31 | 8.448 2714 | 8.452 7467 | 8.457 1764 | 8.461 5613 | 8.465 9023 | 8.470 2003 | 29 |
| 32 | 8.448 3463 | 8.452 8209 | 8.457 2498 | 8.461 6340 | 8.465 9743 | 8.470 2716 | 28 |
| 33 | 8.448 4213 | 8.452 8951 | 8.457 3233 | 8.461 7067 | 8.466 0463 | 8.470 3429 | 27 |
| 34 | 8.448 4962 | 8.452 9693 | 8.457 3967 | 8.461 7794 | 8.466 1182 | 8.470 4141 | 26 |
| 35 | 8.448 5712 | 8.453 0434 | 8.457 4701 | 8.461 8520 | 8.466 1902 | 8.470 4854 | 25 |
| 36 | 8.448 6461 | 8.453 1176 | 8.457 5435 | 8.461 9247 | 8.466 2621 | 8.470 5566 | 24 |
| 37 | 8.448 7210 | 8.453 1917 | 8.457 6169 | 8.461 9973 | 8.466 3340 | 8.470 6278 | 23 |
| 38 | 8.448 7959 | 8.453 2659 | 8.457 6902 | 8.462 0700 | 8.466 4059 | 8.470 6990 | 22 |
| 39 | 8.448 8708 | 8.453 3400 | 8.457 7636 | 8.462 1426 | 8.466 4778 | 8.470 7702 | 21 |
| 40 | 8.448 9456 | 8.453 4141 | 8.457 8369 | 8.462 2152 | 8.466 5497 | 8.470 8414 | 20 |
| 41 | 8.449 0205 | 8.453 4881 | 8.457 9103 | 8.462 2878 | 8.466 6216 | 8.470 9126 | 19 |
| 42 | 8.449 0953 | 8.453 5622 | 8.457 9836 | 8.462 3604 | 8.466 6935 | 8.470 9837 | 18 |
| 43 | 8.449 1701 | 8.453 6363 | 8.458 0569 | 8.462 4330 | 8.466 7653 | 8.471 0549 | 17 |
| 44 | 8.449 2450 | 8.453 7103 | 8.458 1302 | 8.462 5055 | 8.466 8372 | 8.471 1260 | 16 |
| 45 | 8.449 3198 | 8.453 7844 | 8.458 2035 | 8.462 5781 | 8.466 9090 | 8.471 1971 | 15 |
| 46 | 8.449 3945 | 8.453 8584 | 8.458 2768 | 8.462 6506 | 8.466 9808 | 8.471 2682 | 14 |
| 47 | 8.449 4693 | 8.453 9324 | 8.458 3500 | 8.462 7231 | 8.467 0526 | 8.471 3393 | 13 |
| 48 | 8.449 5441 | 8.454 0064 | 8.458 4233 | 8.462 7957 | 8.467 1244 | 8.471 4104 | 12 |
| 49 | 8.449 6188 | 8.454 0804 | 8.458 4965 | 8.462 8682 | 8.467 1962 | 8.471 4815 | 11 |
| 50 | 8.449 6936 | 8.454 1543 | 8.458 5697 | 8.462 9406 | 8.467 2680 | 8.471 5526 | 10 |
| 51 | 8.449 7683 | 8.454 2283 | 8.458 6429 | 8.463 0131 | 8.467 3397 | 8.471 6236 | 9  |
| 52 | 8.449 8430 | 8.454 3023 | 8.458 7161 | 8.463 0856 | 8.467 4115 | 8.471 6947 | 8  |
| 53 | 8.449 9177 | 8.454 3762 | 8.458 7893 | 8.463 1580 | 8.467 4832 | 8.471 7657 | 7  |
| 54 | 8.449 9924 | 8.454 4501 | 8.458 8625 | 8.463 2305 | 8.467 5549 | 8.471 8367 | 6  |
| 55 | 8.450 0671 | 8.454 5240 | 8.458 9357 | 8.463 3029 | 8.467 6266 | 8.471 9077 | 5  |
| 56 | 8.450 1417 | 8.454 5979 | 8.459 0088 | 8.463 3753 | 8.467 6983 | 8.471 9787 | 4  |
| 57 | 8.450 2164 | 8.454 6718 | 8.459 0819 | 8.463 4477 | 8.467 7700 | 8.472 0497 | 3  |
| 58 | 8.450 2910 | 8.454 7457 | 8.459 1551 | 8.463 5201 | 8.467 8417 | 8.472 1207 | 2  |
| 59 | 8.450 3656 | 8.454 8195 | 8.459 2282 | 8.463 5925 | 8.467 9134 | 8.472 1916 | 1  |
|    | 8.4401     | 8.454 8934 | 8.459 3013 | 8.463 6649 | 8.467 9850 | 8.472 2626 | 0  |
|    | 22'        | 21'        | 20'        | 19'        | 18'        |            | "  |

cos 88°



| "  | 36'        | 37'        | 38'        | 39'        | 40'        | 41'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.446 1103 | 8.450 6131 | 8.455 0699 | 8.459 4814 | 8.463 8486 | 8.468 1725 | 60 |
| 1  | 8.446 1857 | 8.450 6878 | 8.455 1438 | 8.459 5545 | 8.463 9211 | 8.468 2442 | 59 |
| 2  | 8.446 2611 | 8.450 7624 | 8.455 2176 | 8.459 6277 | 8.463 9935 | 8.468 3159 | 58 |
| 3  | 8.446 3365 | 8.450 8371 | 8.455 2915 | 8.459 7008 | 8.464 0659 | 8.468 3875 | 57 |
| 4  | 8.446 4119 | 8.450 9117 | 8.455 3654 | 8.459 7739 | 8.464 1382 | 8.468 4592 | 56 |
| 5  | 8.446 4873 | 8.450 9863 | 8.455 4392 | 8.459 8470 | 8.464 2106 | 8.468 5309 | 55 |
| 6  | 8.446 5627 | 8.451 0609 | 8.455 5130 | 8.459 9201 | 8.464 2830 | 8.468 6025 | 54 |
| 7  | 8.446 6380 | 8.451 1354 | 8.455 5868 | 8.459 9932 | 8.464 3553 | 8.468 6741 | 53 |
| 8  | 8.446 7133 | 8.451 2100 | 8.455 6607 | 8.460 0662 | 8.464 4276 | 8.468 7458 | 52 |
| 9  | 8.446 7887 | 8.451 2846 | 8.455 7344 | 8.460 1393 | 8.464 5000 | 8.468 8174 | 51 |
| 10 | 8.446 8640 | 8.451 3591 | 8.455 8082 | 8.460 2123 | 8.464 5723 | 8.468 8890 | 50 |
| 11 | 8.446 9393 | 8.451 4336 | 8.455 8820 | 8.460 2853 | 8.464 6446 | 8.468 9605 | 49 |
| 12 | 8.447 0146 | 8.451 5081 | 8.455 9558 | 8.460 3584 | 8.464 7168 | 8.469 0321 | 48 |
| 13 | 8.447 0898 | 8.451 5826 | 8.456 0295 | 8.460 4314 | 8.464 7891 | 8.469 1037 | 47 |
| 14 | 8.447 1651 | 8.451 6571 | 8.456 1032 | 8.460 5043 | 8.464 8614 | 8.469 1752 | 46 |
| 15 | 8.447 2404 | 8.451 7316 | 8.456 1769 | 8.460 5773 | 8.464 9336 | 8.469 2468 | 45 |
| 16 | 8.447 3156 | 8.451 8061 | 8.456 2506 | 8.460 6503 | 8.465 0059 | 8.469 3183 | 44 |
| 17 | 8.447 3908 | 8.451 8805 | 8.456 3243 | 8.460 7232 | 8.465 0781 | 8.469 3898 | 43 |
| 18 | 8.447 4660 | 8.451 9549 | 8.456 3980 | 8.460 7962 | 8.465 1503 | 8.469 4613 | 42 |
| 19 | 8.447 5412 | 8.452 0294 | 8.456 4717 | 8.460 8691 | 8.465 2225 | 8.469 5328 | 41 |
| 20 | 8.447 6164 | 8.452 1038 | 8.456 5453 | 8.460 9420 | 8.465 2947 | 8.469 6043 | 40 |
| 21 | 8.447 6916 | 8.452 1782 | 8.456 6190 | 8.461 0149 | 8.465 3669 | 8.469 6757 | 39 |
| 22 | 8.447 7667 | 8.452 2526 | 8.456 6926 | 8.461 0878 | 8.465 4390 | 8.469 7472 | 38 |
| 23 | 8.447 8419 | 8.452 3269 | 8.456 7662 | 8.461 1607 | 8.465 5112 | 8.469 8186 | 37 |
| 24 | 8.447 9170 | 8.452 4013 | 8.456 8398 | 8.461 2336 | 8.465 5833 | 8.469 8900 | 36 |
| 25 | 8.447 9921 | 8.452 4757 | 8.456 9134 | 8.461 3064 | 8.465 6555 | 8.469 9615 | 35 |
| 26 | 8.448 0672 | 8.452 5500 | 8.456 9870 | 8.461 3792 | 8.465 7276 | 8.470 0329 | 34 |
| 27 | 8.448 1423 | 8.452 6243 | 8.457 0606 | 8.461 4521 | 8.465 7997 | 8.470 1043 | 33 |
| 28 | 8.448 2174 | 8.452 6986 | 8.457 1341 | 8.461 5249 | 8.465 8718 | 8.470 1756 | 32 |
| 29 | 8.448 2925 | 8.452 7729 | 8.457 2077 | 8.461 5977 | 8.465 9439 | 8.470 2470 | 31 |
| 30 | 8.448 3675 | 8.452 8472 | 8.457 2812 | 8.461 6705 | 8.466 0159 | 8.470 3184 | 30 |
| 31 | 8.448 4426 | 8.452 9215 | 8.457 3547 | 8.461 7433 | 8.466 0880 | 8.470 3897 | 29 |
| 32 | 8.448 5176 | 8.452 9957 | 8.457 4282 | 8.461 8160 | 8.466 1600 | 8.470 4611 | 28 |
| 33 | 8.448 5926 | 8.453 0700 | 8.457 5017 | 8.461 8888 | 8.466 2321 | 8.470 5324 | 27 |
| 34 | 8.448 6676 | 8.453 1442 | 8.457 5752 | 8.461 9615 | 8.466 3041 | 8.470 6037 | 26 |
| 35 | 8.448 7426 | 8.453 2184 | 8.457 6487 | 8.462 0343 | 8.466 3761 | 8.470 6750 | 25 |
| 36 | 8.448 8176 | 8.453 2926 | 8.457 7221 | 8.462 1070 | 8.466 4481 | 8.470 7463 | 24 |
| 37 | 8.448 8925 | 8.453 3668 | 8.457 7956 | 8.462 1797 | 8.466 5201 | 8.470 8176 | 23 |
| 38 | 8.448 9675 | 8.453 4410 | 8.457 8690 | 8.462 2524 | 8.466 5921 | 8.470 8888 | 22 |
| 39 | 8.449 0424 | 8.453 5152 | 8.457 9424 | 8.462 3251 | 8.466 6640 | 8.470 9601 | 21 |
| 40 | 8.449 1173 | 8.453 5893 | 8.458 0158 | 8.462 3978 | 8.466 7360 | 8.471 0313 | 20 |
| 41 | 8.449 1923 | 8.453 6635 | 8.458 0892 | 8.462 4704 | 8.466 8079 | 8.471 1026 | 19 |
| 42 | 8.449 2672 | 8.453 7376 | 8.458 1626 | 8.462 5431 | 8.466 8798 | 8.471 1738 | 18 |
| 43 | 8.449 3420 | 8.453 8117 | 8.458 2360 | 8.462 6157 | 8.466 9517 | 8.471 2450 | 17 |
| 44 | 8.449 4169 | 8.453 8859 | 8.458 3094 | 8.462 6883 | 8.467 0236 | 8.471 3162 | 16 |
| 45 | 8.449 4918 | 8.453 9599 | 8.458 3827 | 8.462 7609 | 8.467 0955 | 8.471 3874 | 15 |
| 46 | 8.449 5666 | 8.454 0340 | 8.458 4560 | 8.462 8335 | 8.467 1674 | 8.471 4586 | 14 |
| 47 | 8.449 6415 | 8.454 1081 | 8.458 5293 | 8.462 9061 | 8.467 2393 | 8.471 5297 | 13 |
| 48 | 8.449 7163 | 8.454 1822 | 8.458 6027 | 8.462 9787 | 8.467 3111 | 8.471 6009 | 12 |
| 49 | 8.449 7911 | 8.454 2562 | 8.458 6760 | 8.463 0512 | 8.467 3830 | 8.471 6720 | 11 |
| 50 | 8.449 8659 | 8.454 3302 | 8.458 7492 | 8.463 1238 | 8.467 4548 | 8.471 7431 | 10 |
| 51 | 8.449 9407 | 8.454 4043 | 8.458 8225 | 8.463 1963 | 8.467 5266 | 8.471 8142 | 9  |
| 52 | 8.450 0154 | 8.454 4783 | 8.458 8958 | 8.463 2689 | 8.467 5984 | 8.471 8853 | 8  |
| 53 | 8.450 0902 | 8.454 5523 | 8.458 9690 | 8.463 3414 | 8.467 6702 | 8.471 9564 | 7  |
| 54 | 8.450 1649 | 8.454 6262 | 8.459 0422 | 8.463 4139 | 8.467 7420 | 8.472 0275 | 6  |
| 55 | 8.450 2397 | 8.454 7002 | 8.459 1155 | 8.463 4864 | 8.467 8138 | 8.472 0986 | 5  |
| 56 | 8.450 3144 | 8.454 7742 | 8.459 1887 | 8.463 5588 | 8.467 8855 | 8.472 1696 | 4  |
| 57 | 8.450 3891 | 8.454 8481 | 8.459 2619 | 8.463 6313 | 8.467 9573 | 8.472 2407 | 3  |
| 58 | 8.450 4638 | 8.454 9220 | 8.459 3351 | 8.463 7038 | 8.468 0290 | 8.472 3117 | 2  |
| 59 | 8.450 5385 | 8.454 9960 | 8.459 4082 | 8.463 7762 | 8.468 1008 | 8.472 3827 | 1  |
| 60 | 8.450 6131 | 8.455 0699 | 8.459 4814 | 8.463 8486 | 8.468 1725 | 8.472 4538 | 0  |
| "  | 28'        | 22'        | 21'        | 20'        | 19'        | 18'        | "  |



| "  | 42'        | 43'        | 44'        | 45'        | 46'        | 47'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.472 1616 | 8.476 4984 | 8.480 6932 | 8.484 8129 | 8.488 9563 | 8.493 0195 | 60 |
| 1  | 8.472 3335 | 8.476 5686 | 8.480 7628 | 8.484 9168 | 8.489 0334 | 8.493 1024 | 59 |
| 2  | 8.472 4044 | 8.476 6388 | 8.480 8323 | 8.484 9857 | 8.489 1022 | 8.493 1730 | 58 |
| 3  | 8.472 4753 | 8.476 7091 | 8.480 9019 | 8.485 0546 | 8.489 1679 | 8.493 2426 | 57 |
| 4  | 8.472 5462 | 8.476 7793 | 8.480 9714 | 8.485 1235 | 8.489 2363 | 8.493 3104 | 56 |
| 5  | 8.472 6171 | 8.476 8495 | 8.481 0410 | 8.485 1923 | 8.489 3043 | 8.493 3784 | 55 |
| 6  | 8.472 6880 | 8.476 9197 | 8.481 1105 | 8.485 2612 | 8.489 3727 | 8.493 4451 | 54 |
| 7  | 8.472 7589 | 8.476 9899 | 8.481 1800 | 8.485 3300 | 8.489 4407 | 8.493 5120 | 53 |
| 8  | 8.472 8297 | 8.477 0600 | 8.481 2495 | 8.485 3989 | 8.489 5089 | 8.493 5784 | 52 |
| 9  | 8.472 9006 | 8.477 1302 | 8.481 3190 | 8.485 4677 | 8.489 5768 | 8.493 6445 | 51 |
| 10 | 8.472 9714 | 8.477 2003 | 8.481 3884 | 8.485 5366 | 8.489 6447 | 8.493 7104 | 50 |
| 11 | 8.473 0422 | 8.477 2705 | 8.481 4579 | 8.485 6054 | 8.489 7124 | 8.493 7760 | 49 |
| 12 | 8.473 1130 | 8.477 3406 | 8.481 5273 | 8.485 6741 | 8.489 7801 | 8.493 8415 | 48 |
| 13 | 8.473 1838 | 8.477 4107 | 8.481 5968 | 8.485 7429 | 8.489 8477 | 8.493 9068 | 47 |
| 14 | 8.473 2546 | 8.477 4808 | 8.481 6662 | 8.485 8116 | 8.489 9152 | 8.493 9719 | 46 |
| 15 | 8.473 3254 | 8.477 5509 | 8.481 7356 | 8.485 8804 | 8.489 9827 | 8.494 0368 | 45 |
| 16 | 8.473 3962 | 8.477 6210 | 8.481 8050 | 8.485 9491 | 8.490 0500 | 8.494 1015 | 44 |
| 17 | 8.473 4669 | 8.477 6910 | 8.481 8744 | 8.486 0179 | 8.490 1172 | 8.494 1659 | 43 |
| 18 | 8.473 5377 | 8.477 7611 | 8.481 9438 | 8.486 0866 | 8.490 1843 | 8.494 2300 | 42 |
| 19 | 8.473 6084 | 8.477 8311 | 8.482 0132 | 8.486 1553 | 8.490 2514 | 8.494 2939 | 41 |
| 20 | 8.473 6791 | 8.477 9012 | 8.482 0825 | 8.486 2240 | 8.490 3184 | 8.494 3576 | 40 |
| 21 | 8.473 7498 | 8.477 9712 | 8.482 1519 | 8.486 2927 | 8.490 3853 | 8.494 4211 | 39 |
| 22 | 8.473 8205 | 8.478 0412 | 8.482 2212 | 8.486 3614 | 8.490 4522 | 8.494 4844 | 38 |
| 23 | 8.473 8912 | 8.478 1112 | 8.482 2905 | 8.486 4301 | 8.490 5190 | 8.494 5475 | 37 |
| 24 | 8.473 9618 | 8.478 1812 | 8.482 3599 | 8.486 4987 | 8.490 5857 | 8.494 6104 | 36 |
| 25 | 8.474 0325 | 8.478 2511 | 8.482 4292 | 8.486 5674 | 8.490 6524 | 8.494 6731 | 35 |
| 26 | 8.474 1032 | 8.478 3211 | 8.482 4985 | 8.486 6360 | 8.490 7190 | 8.494 7356 | 34 |
| 27 | 8.474 1738 | 8.478 3911 | 8.482 5677 | 8.486 7046 | 8.490 7855 | 8.494 7979 | 33 |
| 28 | 8.474 2444 | 8.478 4610 | 8.482 6370 | 8.486 7732 | 8.490 8520 | 8.494 8600 | 32 |
| 29 | 8.474 3150 | 8.478 5309 | 8.482 7063 | 8.486 8418 | 8.490 9184 | 8.494 9219 | 31 |
| 30 | 8.474 3856 | 8.478 6009 | 8.482 7755 | 8.486 9104 | 8.491 0000 | 8.495 0000 | 30 |
| 31 | 8.474 4562 | 8.478 6708 | 8.482 8448 | 8.486 9790 | 8.491 0665 | 8.495 0665 | 29 |
| 32 | 8.474 5268 | 8.478 7407 | 8.482 9140 | 8.487 0476 | 8.491 1330 | 8.495 1330 | 28 |
| 33 | 8.474 5974 | 8.478 8105 | 8.482 9832 | 8.487 1162 | 8.491 1995 | 8.495 1995 | 27 |
| 34 | 8.474 6679 | 8.478 8804 | 8.483 0524 | 8.487 1847 | 8.491 2660 | 8.495 2660 | 26 |
| 35 | 8.474 7385 | 8.478 9503 | 8.483 1216 | 8.487 2533 | 8.491 3325 | 8.495 3325 | 25 |
| 36 | 8.474 8090 | 8.479 0201 | 8.483 1908 | 8.487 3218 | 8.491 3990 | 8.495 3990 | 24 |
| 37 | 8.474 8795 | 8.479 0900 | 8.483 2600 | 8.487 3904 | 8.491 4655 | 8.495 4655 | 23 |
| 38 | 8.474 9500 | 8.479 1598 | 8.483 3291 | 8.487 4589 | 8.491 5320 | 8.495 5320 | 22 |
| 39 | 8.475 0205 | 8.479 2296 | 8.483 3983 | 8.487 5275 | 8.491 5985 | 8.495 5985 | 21 |
| 40 | 8.475 0910 | 8.479 2994 | 8.483 4674 | 8.487 5960 | 8.491 6650 | 8.495 6650 | 20 |
| 41 | 8.475 1615 | 8.479 3692 | 8.483 5365 | 8.487 6646 | 8.491 7315 | 8.495 7315 | 19 |
| 42 | 8.475 2320 | 8.479 4390 | 8.483 6056 | 8.487 7332 | 8.491 7980 | 8.495 7980 | 18 |
| 43 | 8.475 3024 | 8.479 5088 | 8.483 6746 | 8.487 8017 | 8.491 8645 | 8.495 8645 | 17 |
| 44 | 8.475 3729 | 8.479 5785 | 8.483 7437 | 8.487 8703 | 8.491 9310 | 8.495 9310 | 16 |
| 45 | 8.475 4433 | 8.479 6483 | 8.483 8127 | 8.487 9388 | 8.492 0000 | 8.496 0000 | 15 |
| 46 | 8.475 5137 | 8.479 7180 | 8.483 8818 | 8.488 0074 | 8.492 0665 | 8.496 0665 | 14 |
| 47 | 8.475 5841 | 8.479 7878 | 8.483 9508 | 8.488 0759 | 8.492 1330 | 8.496 1330 | 13 |
| 48 | 8.475 6545 | 8.479 8575 | 8.484 0199 | 8.488 1445 | 8.492 1995 | 8.496 1995 | 12 |
| 49 | 8.475 7249 | 8.479 9272 | 8.484 0890 | 8.488 2130 | 8.492 2660 | 8.496 2660 | 11 |
| 50 | 8.475 7953 | 8.479 9969 | 8.484 1581 | 8.488 2816 | 8.492 3325 | 8.496 3325 | 10 |
| 51 | 8.475 8656 | 8.480 0666 | 8.484 2272 | 8.488 3501 | 8.492 3990 | 8.496 3990 | 9  |
| 52 | 8.475 9360 | 8.480 1362 | 8.484 2962 | 8.488 4187 | 8.492 4655 | 8.496 4655 | 8  |
| 53 | 8.476 0063 | 8.480 2059 | 8.484 3653 | 8.488 4872 | 8.492 5320 | 8.496 5320 | 7  |
| 54 | 8.476 0766 | 8.480 2755 | 8.484 4343 | 8.488 5558 | 8.492 5985 | 8.496 5985 | 6  |
| 55 | 8.476 1470 | 8.480 3452 | 8.484 5032 | 8.488 6243 | 8.492 6650 | 8.496 6650 | 5  |
| 56 | 8.476 2173 | 8.480 4148 | 8.484 5721 | 8.488 6929 | 8.492 7315 | 8.496 7315 | 4  |
| 57 | 8.476 2876 | 8.480 4844 | 8.484 6411 | 8.488 7614 | 8.492 7980 | 8.496 7980 | 3  |
| 58 | 8.476 3578 | 8.480 5540 | 8.484 7100 | 8.488 8299 | 8.492 8645 | 8.496 8645 | 2  |
| 59 | 8.476 4281 | 8.480 6236 | 8.484 7790 | 8.488 8984 | 8.492 9310 | 8.496 9310 | 1  |
| 60 | 8.476 4984 | 8.480 6932 | 8.484 8479 | 8.488 9669 | 8.493 0000 | 8.497 0000 | 0  |
| "  | 17'        | 16'        | 15'        | 14'        | 13'        | 12'        | "  |



| "  | 42'        | 43'        | 44'        | 45'        | 46'        | 47'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.472 4538 | 8.476 6933 | 8.480 8920 | 8.485 0505 | 8.489 1696 | 8.493 2502 | 60 |
| 1  | 8.472 5248 | 8.476 7636 | 8.480 9616 | 8.485 1195 | 8.489 2380 | 8.493 3179 | 59 |
| 2  | 8.472 5957 | 8.476 8339 | 8.481 0312 | 8.485 1884 | 8.489 3063 | 8.493 3855 | 58 |
| 3  | 8.472 6667 | 8.476 9042 | 8.481 1008 | 8.485 2574 | 8.489 3746 | 8.493 4532 | 57 |
| 4  | 8.472 7377 | 8.476 9745 | 8.481 1704 | 8.485 3263 | 8.489 4429 | 8.493 5208 | 56 |
| 5  | 8.472 8086 | 8.477 0448 | 8.481 2400 | 8.485 3953 | 8.489 5112 | 8.493 5885 | 55 |
| 6  | 8.472 8796 | 8.477 1150 | 8.481 3096 | 8.485 4642 | 8.489 5794 | 8.493 6561 | 54 |
| 7  | 8.472 9505 | 8.477 1853 | 8.481 3792 | 8.485 5331 | 8.489 6477 | 8.493 7237 | 53 |
| 8  | 8.473 0214 | 8.477 2555 | 8.481 4487 | 8.485 6020 | 8.489 7159 | 8.493 7914 | 52 |
| 9  | 8.473 0923 | 8.477 3257 | 8.481 5183 | 8.485 6709 | 8.489 7842 | 8.493 8590 | 51 |
| 10 | 8.473 1632 | 8.477 3959 | 8.481 5878 | 8.485 7397 | 8.489 8524 | 8.493 9266 | 50 |
| 11 | 8.473 2341 | 8.477 4661 | 8.481 6574 | 8.485 8086 | 8.489 9206 | 8.493 9941 | 49 |
| 12 | 8.473 3050 | 8.477 5363 | 8.481 7269 | 8.485 8775 | 8.489 9888 | 8.494 0617 | 48 |
| 13 | 8.473 3758 | 8.477 6065 | 8.481 7964 | 8.485 9463 | 8.490 0570 | 8.494 1293 | 47 |
| 14 | 8.473 4467 | 8.477 6766 | 8.481 8659 | 8.486 0151 | 8.490 1252 | 8.494 1968 | 46 |
| 15 | 8.473 5175 | 8.477 7468 | 8.481 9353 | 8.486 0839 | 8.490 1934 | 8.494 2643 | 45 |
| 16 | 8.473 5884 | 8.477 8169 | 8.482 0048 | 8.486 1528 | 8.490 2615 | 8.494 3319 | 44 |
| 17 | 8.473 6592 | 8.477 8871 | 8.482 0743 | 8.486 2216 | 8.490 3297 | 8.494 3994 | 43 |
| 18 | 8.473 7300 | 8.477 9572 | 8.482 1437 | 8.486 2903 | 8.490 3978 | 8.494 4669 | 42 |
| 19 | 8.473 8008 | 8.478 0273 | 8.482 2131 | 8.486 3591 | 8.490 4660 | 8.494 5344 | 41 |
| 20 | 8.473 8715 | 8.478 0974 | 8.482 2826 | 8.486 4279 | 8.490 5341 | 8.494 6019 | 40 |
| 21 | 8.473 9423 | 8.478 1675 | 8.482 3520 | 8.486 4966 | 8.490 6022 | 8.494 6694 | 39 |
| 22 | 8.474 0131 | 8.478 2375 | 8.482 4214 | 8.486 5654 | 8.490 6703 | 8.494 7368 | 38 |
| 23 | 8.474 0838 | 8.478 3076 | 8.482 4908 | 8.486 6341 | 8.490 7384 | 8.494 8043 | 37 |
| 24 | 8.474 1545 | 8.478 3776 | 8.482 5602 | 8.486 7028 | 8.490 8065 | 8.494 8717 | 36 |
| 25 | 8.474 2253 | 8.478 4477 | 8.482 6295 | 8.486 7716 | 8.490 8745 | 8.494 9392 | 35 |
| 26 | 8.474 2960 | 8.478 5177 | 8.482 6989 | 8.486 8403 | 8.490 9426 | 8.495 0066 | 34 |
| 27 | 8.474 3667 | 8.478 5877 | 8.482 7682 | 8.486 9089 | 8.491 0106 | 8.495 0740 | 33 |
| 28 | 8.474 4374 | 8.478 6577 | 8.482 8376 | 8.486 9776 | 8.491 0787 | 8.495 1414 | 32 |
| 29 | 8.474 5080 | 8.478 7277 | 8.482 9069 | 8.487 0463 | 8.491 1467 | 8.495 2088 | 31 |
| 30 | 8.474 5787 | 8.478 7977 | 8.482 9762 | 8.487 1149 | 8.491 2147 | 8.495 2762 | 30 |
| 31 | 8.474 6494 | 8.478 8677 | 8.483 0455 | 8.487 1836 | 8.491 2827 | 8.495 3435 | 29 |
| 32 | 8.474 7200 | 8.478 9376 | 8.483 1148 | 8.487 2522 | 8.491 3507 | 8.495 4109 | 28 |
| 33 | 8.474 7906 | 8.479 0076 | 8.483 1841 | 8.487 3209 | 8.491 4187 | 8.495 4783 | 27 |
| 34 | 8.474 8612 | 8.479 0775 | 8.483 2533 | 8.487 3895 | 8.491 4866 | 8.495 5456 | 26 |
| 35 | 8.474 9319 | 8.479 1475 | 8.483 3226 | 8.487 4581 | 8.491 5546 | 8.495 6129 | 25 |
| 36 | 8.475 0025 | 8.479 2174 | 8.483 3919 | 8.487 5267 | 8.491 6226 | 8.495 6802 | 24 |
| 37 | 8.475 0730 | 8.479 2873 | 8.483 4611 | 8.487 5952 | 8.491 6905 | 8.495 7476 | 23 |
| 38 | 8.475 1436 | 8.479 3572 | 8.483 5303 | 8.487 6638 | 8.491 7584 | 8.495 8148 | 22 |
| 39 | 8.475 2142 | 8.479 4271 | 8.483 5995 | 8.487 7324 | 8.491 8263 | 8.495 8821 | 21 |
| 40 | 8.475 2847 | 8.479 4969 | 8.483 6687 | 8.487 8009 | 8.491 8942 | 8.495 9494 | 20 |
| 41 | 8.475 3553 | 8.479 5668 | 8.483 7379 | 8.487 8695 | 8.491 9621 | 8.496 0167 | 19 |
| 42 | 8.475 4258 | 8.479 6366 | 8.483 8071 | 8.487 9380 | 8.492 0300 | 8.496 0839 | 18 |
| 43 | 8.475 4963 | 8.479 7065 | 8.483 8763 | 8.488 0065 | 8.492 0979 | 8.496 1512 | 17 |
| 44 | 8.475 5668 | 8.479 7763 | 8.483 9454 | 8.488 0750 | 8.492 1658 | 8.496 2184 | 16 |
| 45 | 8.475 6373 | 8.479 8461 | 8.484 0146 | 8.488 1435 | 8.492 2336 | 8.496 2856 | 15 |
| 46 | 8.475 7078 | 8.479 9159 | 8.484 0837 | 8.488 2120 | 8.492 3015 | 8.496 3529 | 14 |
| 47 | 8.475 7783 | 8.479 9857 | 8.484 1528 | 8.488 2805 | 8.492 3693 | 8.496 4201 | 13 |
| 48 | 8.475 8487 | 8.480 0555 | 8.484 2220 | 8.488 3489 | 8.492 4371 | 8.496 4873 | 12 |
| 49 | 8.475 9192 | 8.480 1252 | 8.484 2911 | 8.488 4174 | 8.492 5049 | 8.496 5544 | 11 |
| 50 | 8.475 9896 | 8.480 1950 | 8.484 3602 | 8.488 4858 | 8.492 5727 | 8.496 6216 | 10 |
| 51 | 8.476 0600 | 8.480 2648 | 8.484 4292 | 8.488 5543 | 8.492 6405 | 8.496 6888 | 9  |
| 52 | 8.476 1304 | 8.480 3345 | 8.484 4983 | 8.488 6227 | 8.492 7083 | 8.496 7559 | 8  |
| 53 | 8.476 2008 | 8.480 4042 | 8.484 5674 | 8.488 6911 | 8.492 7761 | 8.496 8231 | 7  |
| 54 | 8.476 2712 | 8.480 4739 | 8.484 6364 | 8.488 7595 | 8.492 8438 | 8.496 8902 | 6  |
| 55 | 8.476 3416 | 8.480 5436 | 8.484 7055 | 8.488 8279 | 8.492 9116 | 8.496 9573 | 5  |
| 56 | 8.476 4120 | 8.480 6133 | 8.484 7745 | 8.488 8962 | 8.492 9793 | 8.497 0244 | 4  |
| 57 | 8.476 4823 | 8.480 6830 | 8.484 8435 | 8.488 9646 | 8.493 0471 | 8.497 0915 | 3  |
| 58 | 8.476 5527 | 8.480 7527 | 8.484 9125 | 8.489 0330 | 8.493 1148 | 8.497 1586 | 2  |
| 59 | 8.476 6230 | 8.480 8223 | 8.484 9815 | 8.489 1013 | 8.493 1825 | 8.497 2257 | 1  |
| 60 | 8.476 6933 | 8.480 8920 | 8.485 0505 | 8.489 1696 | 8.493 2502 | 8.497 2928 | 0  |
| "  | 17'        | 16'        | 15'        | 14'        | 18'        | 12'        | "  |



| "  | 48'        | 49'        | 50'        | 51'        | 52'        | 53'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.497 0784 | 8.501 0798 | 8.505 0817 | 8.508 8346 | 8.512 8534 | 8.516 8724 | 60 |
| 1  | 8.497 1454 | 8.501 1468 | 8.505 1488 | 8.509 1517 | 8.513 1704 | 8.517 1894 | 59 |
| 2  | 8.497 2124 | 8.501 2138 | 8.505 2158 | 8.509 2187 | 8.513 2374 | 8.517 2564 | 58 |
| 3  | 8.497 2794 | 8.501 2808 | 8.505 2828 | 8.509 2857 | 8.513 3044 | 8.517 3234 | 57 |
| 4  | 8.497 3464 | 8.501 3478 | 8.505 3498 | 8.509 3527 | 8.513 3714 | 8.517 3904 | 56 |
| 5  | 8.497 4134 | 8.501 4148 | 8.505 4168 | 8.509 4197 | 8.513 4384 | 8.517 4574 | 55 |
| 6  | 8.497 4804 | 8.501 4818 | 8.505 4838 | 8.509 4867 | 8.513 5054 | 8.517 5244 | 54 |
| 7  | 8.497 5474 | 8.501 5488 | 8.505 5508 | 8.509 5537 | 8.513 5724 | 8.517 5914 | 53 |
| 8  | 8.497 6144 | 8.501 6158 | 8.505 6178 | 8.509 6207 | 8.513 6394 | 8.517 6584 | 52 |
| 9  | 8.497 6814 | 8.501 6828 | 8.505 6848 | 8.509 6877 | 8.513 7064 | 8.517 7254 | 51 |
| 10 | 8.497 7484 | 8.501 7498 | 8.505 7518 | 8.509 7547 | 8.513 7734 | 8.517 7924 | 50 |
| 11 | 8.497 8154 | 8.501 8168 | 8.505 8188 | 8.509 8217 | 8.513 8404 | 8.517 8594 | 49 |
| 12 | 8.497 8824 | 8.501 8838 | 8.505 8858 | 8.509 8887 | 8.513 9074 | 8.517 9264 | 48 |
| 13 | 8.497 9494 | 8.501 9508 | 8.505 9528 | 8.509 9557 | 8.513 9744 | 8.517 9934 | 47 |
| 14 | 8.498 0164 | 8.502 0178 | 8.506 0198 | 8.510 0227 | 8.514 0414 | 8.518 0604 | 46 |
| 15 | 8.498 0834 | 8.502 0848 | 8.506 0868 | 8.510 0897 | 8.514 1084 | 8.518 1274 | 45 |
| 16 | 8.498 1504 | 8.502 1518 | 8.506 1538 | 8.510 1567 | 8.514 1754 | 8.518 1944 | 44 |
| 17 | 8.498 2174 | 8.502 2188 | 8.506 2208 | 8.510 2237 | 8.514 2424 | 8.518 2614 | 43 |
| 18 | 8.498 2844 | 8.502 2858 | 8.506 2878 | 8.510 2907 | 8.514 3094 | 8.518 3284 | 42 |
| 19 | 8.498 3514 | 8.502 3528 | 8.506 3548 | 8.510 3577 | 8.514 3764 | 8.518 3954 | 41 |
| 20 | 8.498 4184 | 8.502 4198 | 8.506 4218 | 8.510 4247 | 8.514 4434 | 8.518 4624 | 40 |
| 21 | 8.498 4854 | 8.502 4868 | 8.506 4888 | 8.510 4917 | 8.514 5104 | 8.518 5294 | 39 |
| 22 | 8.498 5524 | 8.502 5538 | 8.506 5558 | 8.510 5587 | 8.514 5774 | 8.518 5964 | 38 |
| 23 | 8.498 6194 | 8.502 6208 | 8.506 6228 | 8.510 6257 | 8.514 6444 | 8.518 6634 | 37 |
| 24 | 8.498 6864 | 8.502 6878 | 8.506 6898 | 8.510 6927 | 8.514 7114 | 8.518 7304 | 36 |
| 25 | 8.498 7534 | 8.502 7548 | 8.506 7568 | 8.510 7597 | 8.514 7784 | 8.518 7974 | 35 |
| 26 | 8.498 8204 | 8.502 8218 | 8.506 8238 | 8.510 8267 | 8.514 8454 | 8.518 8644 | 34 |
| 27 | 8.498 8874 | 8.502 8888 | 8.506 8908 | 8.510 8937 | 8.514 9124 | 8.518 9314 | 33 |
| 28 | 8.498 9544 | 8.502 9558 | 8.506 9578 | 8.510 9607 | 8.514 9794 | 8.518 9984 | 32 |
| 29 | 8.499 0214 | 8.503 0228 | 8.507 0248 | 8.511 0277 | 8.515 0464 | 8.519 0654 | 31 |
| 30 | 8.499 0884 | 8.503 0898 | 8.507 0918 | 8.511 0947 | 8.515 1134 | 8.519 1324 | 30 |
| 31 | 8.499 1554 | 8.503 1568 | 8.507 1588 | 8.511 1617 | 8.515 1804 | 8.519 1994 | 29 |
| 32 | 8.499 2224 | 8.503 2238 | 8.507 2258 | 8.511 2287 | 8.515 2474 | 8.519 2664 | 28 |
| 33 | 8.499 2894 | 8.503 2908 | 8.507 2928 | 8.511 2957 | 8.515 3144 | 8.519 3334 | 27 |
| 34 | 8.499 3564 | 8.503 3578 | 8.507 3598 | 8.511 3627 | 8.515 3814 | 8.519 4004 | 26 |
| 35 | 8.499 4234 | 8.503 4248 | 8.507 4268 | 8.511 4297 | 8.515 4484 | 8.519 4674 | 25 |
| 36 | 8.499 4904 | 8.503 4918 | 8.507 4938 | 8.511 4967 | 8.515 5154 | 8.519 5344 | 24 |
| 37 | 8.499 5574 | 8.503 5588 | 8.507 5608 | 8.511 5637 | 8.515 5824 | 8.519 6014 | 23 |
| 38 | 8.499 6244 | 8.503 6258 | 8.507 6278 | 8.511 6307 | 8.515 6494 | 8.519 6684 | 22 |
| 39 | 8.499 6914 | 8.503 6928 | 8.507 6948 | 8.511 6977 | 8.515 7164 | 8.519 7354 | 21 |
| 40 | 8.499 7584 | 8.503 7598 | 8.507 7618 | 8.511 7647 | 8.515 7834 | 8.519 8024 | 20 |
| 41 | 8.499 8254 | 8.503 8268 | 8.507 8288 | 8.511 8317 | 8.515 8504 | 8.519 8694 | 19 |
| 42 | 8.499 8924 | 8.503 8938 | 8.507 8958 | 8.511 8987 | 8.515 9174 | 8.519 9364 | 18 |
| 43 | 8.499 9594 | 8.503 9608 | 8.507 9628 | 8.511 9657 | 8.515 9844 | 8.519 1004 | 17 |
| 44 | 8.500 0264 | 8.504 0278 | 8.508 0298 | 8.512 0327 | 8.516 0514 | 8.520 0704 | 16 |
| 45 | 8.500 0934 | 8.504 0948 | 8.508 0968 | 8.512 0997 | 8.516 1184 | 8.520 1374 | 15 |
| 46 | 8.500 1604 | 8.504 1618 | 8.508 1638 | 8.512 1667 | 8.516 1854 | 8.520 2044 | 14 |
| 47 | 8.500 2274 | 8.504 2288 | 8.508 2308 | 8.512 2337 | 8.516 2524 | 8.520 2714 | 13 |
| 48 | 8.500 2944 | 8.504 2958 | 8.508 2978 | 8.512 2997 | 8.516 3184 | 8.520 3374 | 12 |
| 49 | 8.500 3614 | 8.504 3628 | 8.508 3648 | 8.512 3677 | 8.516 3864 | 8.520 4064 | 11 |
| 50 | 8.500 4284 | 8.504 4298 | 8.508 4318 | 8.512 4347 | 8.516 4534 | 8.520 4724 | 10 |
| 51 | 8.500 4954 | 8.504 4968 | 8.508 4988 | 8.512 5017 | 8.516 5204 | 8.520 5394 | 9  |
| 52 | 8.500 5624 | 8.504 5638 | 8.508 5658 | 8.512 5687 | 8.516 5874 | 8.520 6064 | 8  |
| 53 | 8.500 6294 | 8.504 6308 | 8.508 6328 | 8.512 6357 | 8.516 6544 | 8.520 6734 | 7  |
| 54 | 8.500 6964 | 8.504 6978 | 8.508 6998 | 8.512 7027 | 8.516 7214 | 8.520 7404 | 6  |
| 55 | 8.500 7634 | 8.504 7648 | 8.508 7668 | 8.512 7697 | 8.516 7884 | 8.520 8074 | 5  |
| 56 | 8.500 8304 | 8.504 8318 | 8.508 8338 | 8.512 8367 | 8.516 8554 | 8.520 8744 | 4  |
| 57 | 8.500 8974 | 8.504 8988 | 8.508 9008 | 8.512 9037 | 8.516 9224 | 8.520 9414 | 3  |
| 58 | 8.500 9644 | 8.504 9658 | 8.508 9678 | 8.512 9707 | 8.516 9894 | 8.521 0084 | 2  |
| 59 | 8.501 0314 | 8.505 0328 | 8.509 0348 | 8.513 0377 | 8.517 0564 | 8.521 0754 | 1  |
| 60 | 8.501 0984 | 8.505 1008 | 8.509 1028 | 8.513 1057 | 8.517 1244 | 8.521 1434 | 0  |
| "  | 11'        | 10'        | 9'         | 8'         | 7'         | 6'         | "  |



| "  | 48'        | 49'        | 50'        | 51'        | 52'        | 53'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.497 2928 | 8.501 2982 | 8.505 2671 | 8.509 2001 | 8.513 0978 | 8.516 9610 | 60 |
| 1  | 8.497 3598 | 8.501 3646 | 8.505 3329 | 8.509 2653 | 8.513 1625 | 8.517 0251 | 59 |
| 2  | 8.497 4269 | 8.501 4311 | 8.505 3987 | 8.509 3305 | 8.513 2272 | 8.517 0892 | 58 |
| 3  | 8.497 4939 | 8.501 4975 | 8.505 4646 | 8.509 3958 | 8.513 2918 | 8.517 1533 | 57 |
| 4  | 8.497 5610 | 8.501 5639 | 8.505 5304 | 8.509 4610 | 8.513 3564 | 8.517 2173 | 56 |
| 5  | 8.497 6280 | 8.501 6303 | 8.505 5962 | 8.509 5262 | 8.513 4211 | 8.517 2814 | 55 |
| 6  | 8.497 6950 | 8.501 6967 | 8.505 6620 | 8.509 5914 | 8.513 4857 | 8.517 3455 | 54 |
| 7  | 8.497 7620 | 8.501 7631 | 8.505 7277 | 8.509 6566 | 8.513 5503 | 8.517 4095 | 53 |
| 8  | 8.497 8290 | 8.501 8295 | 8.505 7935 | 8.509 7218 | 8.513 6149 | 8.517 4735 | 52 |
| 9  | 8.497 8959 | 8.501 8958 | 8.505 8593 | 8.509 7870 | 8.513 6795 | 8.517 5375 | 51 |
| 10 | 8.497 9629 | 8.501 9622 | 8.505 9250 | 8.509 8521 | 8.513 7441 | 8.517 6016 | 50 |
| 11 | 8.498 0299 | 8.502 0285 | 8.505 9908 | 8.509 9173 | 8.513 8087 | 8.517 6656 | 49 |
| 12 | 8.498 0968 | 8.502 0949 | 8.506 0565 | 8.509 9824 | 8.513 8732 | 8.517 7296 | 48 |
| 13 | 8.498 1638 | 8.502 1612 | 8.506 1222 | 8.510 0475 | 8.513 9378 | 8.517 7935 | 47 |
| 14 | 8.498 2307 | 8.502 2275 | 8.506 1879 | 8.510 1127 | 8.514 0023 | 8.517 8575 | 46 |
| 15 | 8.498 2976 | 8.502 2938 | 8.506 2536 | 8.510 1778 | 8.514 0668 | 8.517 9215 | 45 |
| 16 | 8.498 3645 | 8.502 3601 | 8.506 3193 | 8.510 2429 | 8.514 1314 | 8.517 9854 | 44 |
| 17 | 8.498 4314 | 8.502 4264 | 8.506 3850 | 8.510 3080 | 8.514 1959 | 8.518 0494 | 43 |
| 18 | 8.498 4983 | 8.502 4927 | 8.506 4507 | 8.510 3731 | 8.514 2604 | 8.518 1133 | 42 |
| 19 | 8.498 5652 | 8.502 5589 | 8.506 5164 | 8.510 4381 | 8.514 3249 | 8.518 1772 | 41 |
| 20 | 8.498 6320 | 8.502 6252 | 8.506 5820 | 8.510 5032 | 8.514 3894 | 8.518 2412 | 40 |
| 21 | 8.498 6989 | 8.502 6914 | 8.506 6477 | 8.510 5683 | 8.514 4539 | 8.518 3051 | 39 |
| 22 | 8.498 7657 | 8.502 7576 | 8.506 7133 | 8.510 6333 | 8.514 5183 | 8.518 3690 | 38 |
| 23 | 8.498 8325 | 8.502 8239 | 8.506 7789 | 8.510 6983 | 8.514 5828 | 8.518 4329 | 37 |
| 24 | 8.498 8994 | 8.502 8901 | 8.506 8445 | 8.510 7634 | 8.514 6472 | 8.518 4967 | 36 |
| 25 | 8.498 9662 | 8.502 9563 | 8.506 9101 | 8.510 8284 | 8.514 7117 | 8.518 5606 | 35 |
| 26 | 8.499 0330 | 8.503 0225 | 8.506 9757 | 8.510 8934 | 8.514 7761 | 8.518 6245 | 34 |
| 27 | 8.499 0998 | 8.503 0887 | 8.507 0413 | 8.510 9584 | 8.514 8405 | 8.518 6883 | 33 |
| 28 | 8.499 1666 | 8.503 1548 | 8.507 1069 | 8.511 0234 | 8.514 9049 | 8.518 7522 | 32 |
| 29 | 8.499 2333 | 8.503 2210 | 8.507 1724 | 8.511 0883 | 8.514 9693 | 8.518 8160 | 31 |
| 30 | 8.499 3001 | 8.503 2871 | 8.507 2380 | 8.511 1533 | 8.515 0337 | 8.518 8798 | 30 |
| 31 | 8.499 3668 | 8.503 3533 | 8.507 3035 | 8.511 2183 | 8.515 0981 | 8.518 9436 | 29 |
| 32 | 8.499 4336 | 8.503 4194 | 8.507 3691 | 8.511 2832 | 8.515 1625 | 8.519 0074 | 28 |
| 33 | 8.499 5003 | 8.503 4855 | 8.507 4346 | 8.511 3482 | 8.515 2268 | 8.519 0712 | 27 |
| 34 | 8.499 5670 | 8.503 5517 | 8.507 5001 | 8.511 4131 | 8.515 2912 | 8.519 1350 | 26 |
| 35 | 8.499 6337 | 8.503 6178 | 8.507 5656 | 8.511 4780 | 8.515 3555 | 8.519 1988 | 25 |
| 36 | 8.499 7004 | 8.503 6838 | 8.507 6311 | 8.511 5429 | 8.515 4199 | 8.519 2626 | 24 |
| 37 | 8.499 7671 | 8.503 7499 | 8.507 6966 | 8.511 6078 | 8.515 4842 | 8.519 3263 | 23 |
| 38 | 8.499 8338 | 8.503 8160 | 8.507 7621 | 8.511 6727 | 8.515 5485 | 8.519 3901 | 22 |
| 39 | 8.499 9005 | 8.503 8821 | 8.507 8275 | 8.511 7376 | 8.515 6128 | 8.519 4538 | 21 |
| 40 | 8.499 9671 | 8.503 9481 | 8.507 8930 | 8.511 8025 | 8.515 6771 | 8.519 5175 | 20 |
| 41 | 8.500 0338 | 8.504 0142 | 8.507 9584 | 8.511 8673 | 8.515 7414 | 8.519 5813 | 19 |
| 42 | 8.500 1004 | 8.504 0802 | 8.508 0239 | 8.511 9322 | 8.515 8057 | 8.519 6450 | 18 |
| 43 | 8.500 1671 | 8.504 1462 | 8.508 0893 | 8.511 9970 | 8.515 8699 | 8.519 7087 | 17 |
| 44 | 8.500 2337 | 8.504 2122 | 8.508 1547 | 8.512 0618 | 8.515 9342 | 8.519 7724 | 16 |
| 45 | 8.500 3003 | 8.504 2782 | 8.508 2201 | 8.512 1267 | 8.515 9984 | 8.519 8361 | 15 |
| 46 | 8.500 3669 | 8.504 3442 | 8.508 2855 | 8.512 1915 | 8.516 0627 | 8.519 8997 | 14 |
| 47 | 8.500 4335 | 8.504 4102 | 8.508 3509 | 8.512 2563 | 8.516 1269 | 8.519 9634 | 13 |
| 48 | 8.500 5000 | 8.504 4762 | 8.508 4163 | 8.512 3211 | 8.516 1911 | 8.520 0271 | 12 |
| 49 | 8.500 5666 | 8.504 5421 | 8.508 4817 | 8.512 3859 | 8.516 2553 | 8.520 0907 | 11 |
| 50 | 8.500 6332 | 8.504 6081 | 8.508 5470 | 8.512 4506 | 8.516 3195 | 8.520 1543 | 10 |
| 51 | 8.500 6997 | 8.504 6740 | 8.508 6124 | 8.512 5154 | 8.516 3837 | 8.520 2180 | 9  |
| 52 | 8.500 7663 | 8.504 7400 | 8.508 6777 | 8.512 5801 | 8.516 4479 | 8.520 2816 | 8  |
| 53 | 8.500 8328 | 8.504 8059 | 8.508 7430 | 8.512 6449 | 8.516 5121 | 8.520 3452 | 7  |
| 54 | 8.500 8993 | 8.504 8718 | 8.508 8084 | 8.512 7096 | 8.516 5762 | 8.520 4088 | 6  |
| 55 | 8.500 9658 | 8.504 9377 | 8.508 8737 | 8.512 7743 | 8.516 6404 | 8.520 4724 | 5  |
| 56 | 8.501 0323 | 8.505 0036 | 8.508 9390 | 8.512 8391 | 8.516 7045 | 8.520 5360 | 4  |
| 57 | 8.501 0988 | 8.505 0695 | 8.509 0042 | 8.512 9038 | 8.516 7687 | 8.520 5995 | 3  |
| 58 | 8.501 1653 | 8.505 1353 | 8.509 0695 | 8.512 9685 | 8.516 8328 | 8.520 6631 | 2  |
| 59 | 8.501 2317 | 8.505 2012 | 8.509 1348 | 8.513 0332 | 8.516 8969 | 8.520 7267 | 1  |
| 60 | 8.501 2982 | 8.505 2671 | 8.509 2001 | 8.513 0978 | 8.516 9610 | 8.520 7902 | 0  |
| "  | 11'        | 10'        | 9'         | 8'         | 7'         | 6'         | "  |



| "  | 54'        | 55'        | 56'        | 57'        | 58'        | 59'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.520 5514 | 8.524 3430 | 8.528 1017 | 8.531 8281 | 8.535 5228 | 8.539 1863 | 60 |
| 1  | 8.520 6148 | 8.524 4059 | 8.528 1641 | 8.531 8900 | 8.535 5842 | 8.539 2471 | 59 |
| 2  | 8.520 6783 | 8.524 4688 | 8.528 2264 | 8.531 9518 | 8.535 6455 | 8.539 3079 | 58 |
| 3  | 8.520 7417 | 8.524 5317 | 8.528 2888 | 8.532 0136 | 8.535 7068 | 8.539 3687 | 57 |
| 4  | 8.520 8052 | 8.524 5946 | 8.528 3511 | 8.532 0754 | 8.535 7680 | 8.539 4295 | 56 |
| 5  | 8.520 8686 | 8.524 6574 | 8.528 4135 | 8.532 1372 | 8.535 8293 | 8.539 4902 | 55 |
| 6  | 8.520 9320 | 8.524 7203 | 8.528 4758 | 8.532 1990 | 8.535 8906 | 8.539 5510 | 54 |
| 7  | 8.520 9954 | 8.524 7832 | 8.528 5381 | 8.532 2608 | 8.535 9518 | 8.539 6117 | 53 |
| 8  | 8.521 0588 | 8.524 8460 | 8.528 6004 | 8.532 3226 | 8.536 0131 | 8.539 6725 | 52 |
| 9  | 8.521 1222 | 8.524 9088 | 8.528 6627 | 8.532 3844 | 8.536 0743 | 8.539 7332 | 51 |
| 10 | 8.521 1856 | 8.524 9717 | 8.528 7250 | 8.532 4461 | 8.536 1356 | 8.539 7939 | 50 |
| 11 | 8.521 2490 | 8.525 0345 | 8.528 7873 | 8.532 5079 | 8.536 1968 | 8.539 8546 | 49 |
| 12 | 8.521 3123 | 8.525 0973 | 8.528 8495 | 8.532 5696 | 8.536 2580 | 8.539 9153 | 48 |
| 13 | 8.521 3757 | 8.525 1601 | 8.528 9118 | 8.532 6313 | 8.536 3192 | 8.539 9760 | 47 |
| 14 | 8.521 4390 | 8.525 2229 | 8.528 9741 | 8.532 6931 | 8.536 3804 | 8.540 0367 | 46 |
| 15 | 8.521 5024 | 8.525 2857 | 8.529 0363 | 8.532 7548 | 8.536 4416 | 8.540 0974 | 45 |
| 16 | 8.521 5657 | 8.525 3485 | 8.529 0985 | 8.532 8165 | 8.536 5028 | 8.540 1581 | 44 |
| 17 | 8.521 6290 | 8.525 4112 | 8.529 1608 | 8.532 8782 | 8.536 5640 | 8.540 2187 | 43 |
| 18 | 8.521 6923 | 8.525 4740 | 8.529 2230 | 8.532 9399 | 8.536 6251 | 8.540 2794 | 42 |
| 19 | 8.521 7556 | 8.525 5367 | 8.529 2852 | 8.533 0015 | 8.536 6863 | 8.540 3400 | 41 |
| 20 | 8.521 8189 | 8.525 5995 | 8.529 3474 | 8.533 0632 | 8.536 7474 | 8.540 4007 | 40 |
| 21 | 8.521 8822 | 8.525 6622 | 8.529 4096 | 8.533 1249 | 8.536 8086 | 8.540 4613 | 39 |
| 22 | 8.521 9455 | 8.525 7249 | 8.529 4718 | 8.533 1865 | 8.536 8697 | 8.540 5219 | 38 |
| 23 | 8.522 0087 | 8.525 7877 | 8.529 5339 | 8.533 2482 | 8.536 9308 | 8.540 5825 | 37 |
| 24 | 8.522 0720 | 8.525 8504 | 8.529 5961 | 8.533 3098 | 8.536 9920 | 8.540 6431 | 36 |
| 25 | 8.522 1352 | 8.525 9131 | 8.529 6583 | 8.533 3714 | 8.537 0531 | 8.540 7037 | 35 |
| 26 | 8.522 1985 | 8.525 9757 | 8.529 7204 | 8.533 4330 | 8.537 1142 | 8.540 7643 | 34 |
| 27 | 8.522 2617 | 8.526 0384 | 8.529 7826 | 8.533 4946 | 8.537 1752 | 8.540 8249 | 33 |
| 28 | 8.522 3249 | 8.526 1011 | 8.529 8447 | 8.533 5562 | 8.537 2363 | 8.540 8854 | 32 |
| 29 | 8.522 3881 | 8.526 1637 | 8.529 9068 | 8.533 6178 | 8.537 2974 | 8.540 9460 | 31 |
| 30 | 8.522 4513 | 8.526 2264 | 8.529 9689 | 8.533 6794 | 8.537 3585 | 8.541 0066 | 30 |
| 31 | 8.522 5145 | 8.526 2890 | 8.530 0310 | 8.533 7410 | 8.537 4195 | 8.541 0671 | 29 |
| 32 | 8.522 5777 | 8.526 3517 | 8.530 0931 | 8.533 8026 | 8.537 4806 | 8.541 1276 | 28 |
| 33 | 8.522 6408 | 8.526 4143 | 8.530 1552 | 8.533 8641 | 8.537 5416 | 8.541 1882 | 27 |
| 34 | 8.522 7040 | 8.526 4769 | 8.530 2173 | 8.533 9257 | 8.537 6026 | 8.541 2487 | 26 |
| 35 | 8.522 7672 | 8.526 5395 | 8.530 2793 | 8.533 9872 | 8.537 6636 | 8.541 3092 | 25 |
| 36 | 8.522 8303 | 8.526 6021 | 8.530 3414 | 8.534 0487 | 8.537 7247 | 8.541 3697 | 24 |
| 37 | 8.522 8934 | 8.526 6647 | 8.530 4034 | 8.534 1103 | 8.537 7857 | 8.541 4302 | 23 |
| 38 | 8.522 9566 | 8.526 7273 | 8.530 4655 | 8.534 1718 | 8.537 8466 | 8.541 4907 | 22 |
| 39 | 8.523 0197 | 8.526 7898 | 8.530 5275 | 8.534 2333 | 8.537 9076 | 8.541 5511 | 21 |
| 40 | 8.523 0828 | 8.526 8524 | 8.530 5895 | 8.534 2948 | 8.537 9686 | 8.541 6116 | 20 |
| 41 | 8.523 1459 | 8.526 9149 | 8.530 6516 | 8.534 3563 | 8.538 0296 | 8.541 6721 | 19 |
| 42 | 8.523 2090 | 8.526 9775 | 8.530 7136 | 8.534 4177 | 8.538 0905 | 8.541 7325 | 18 |
| 43 | 8.523 2720 | 8.527 0400 | 8.530 7756 | 8.534 4792 | 8.538 1515 | 8.541 7929 | 17 |
| 44 | 8.523 3351 | 8.527 1025 | 8.530 8375 | 8.534 5407 | 8.538 2124 | 8.541 8534 | 16 |
| 45 | 8.523 3982 | 8.527 1651 | 8.530 8995 | 8.534 6021 | 8.538 2734 | 8.541 9138 | 15 |
| 46 | 8.523 4612 | 8.527 2276 | 8.530 9615 | 8.534 6636 | 8.538 3343 | 8.541 9742 | 14 |
| 47 | 8.523 5243 | 8.527 2901 | 8.531 0235 | 8.534 7250 | 8.538 3952 | 8.542 0346 | 13 |
| 48 | 8.523 5873 | 8.527 3525 | 8.531 0854 | 8.534 7864 | 8.538 4561 | 8.542 0950 | 12 |
| 49 | 8.523 6503 | 8.527 4150 | 8.531 1473 | 8.534 8478 | 8.538 5170 | 8.542 1554 | 11 |
| 50 | 8.523 7133 | 8.527 4775 | 8.531 2093 | 8.534 9092 | 8.538 5779 | 8.542 2158 | 10 |
| 51 | 8.523 7763 | 8.527 5400 | 8.531 2712 | 8.534 9706 | 8.538 6388 | 8.542 2762 | 9  |
| 52 | 8.523 8393 | 8.527 6024 | 8.531 3331 | 8.535 0320 | 8.538 6997 | 8.542 3365 | 8  |
| 53 | 8.523 9023 | 8.527 6648 | 8.531 3950 | 8.535 0934 | 8.538 7605 | 8.542 3969 | 7  |
| 54 | 8.523 9653 | 8.527 7273 | 8.531 4569 | 8.535 1548 | 8.538 8214 | 8.542 4572 | 6  |
| 55 | 8.524 0283 | 8.527 7897 | 8.531 5188 | 8.535 2161 | 8.538 8822 | 8.542 5176 | 5  |
| 56 | 8.524 0912 | 8.527 8521 | 8.531 5807 | 8.535 2775 | 8.538 9431 | 8.542 5779 | 4  |
| 57 | 8.524 1542 | 8.527 9145 | 8.531 6426 | 8.535 3389 | 8.539 0039 | 8.542 6382 | 3  |
| 58 | 8.524 2171 | 8.527 9769 | 8.531 7044 | 8.535 4002 | 8.539 0647 | 8.542 6986 | 2  |
| 59 | 8.524 2800 | 8.528 0393 | 8.531 7663 | 8.535 4615 | 8.539 1255 | 8.542 7589 | 1  |
| 60 | 8.524 3430 | 8.528 1017 | 8.531 8281 | 8.535 5228 | 8.539 1863 | 8.542 8192 | 0  |
| "  | 5'         | 4'         | 3'         | 2'         | 1'         | 0'         | "  |



| "  | 54'        | 55'        | 56'        | 57'        | 58'        | 59'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.520 7902 | 8.524 5860 | 8.528 3490 | 8.532 0797 | 8.535 7787 | 8.539 4466 | 60 |
| 1  | 8.520 8537 | 8.524 6490 | 8.528 4114 | 8.532 1416 | 8.535 8401 | 8.539 5075 | 59 |
| 2  | 8.520 9173 | 8.524 7120 | 8.528 4739 | 8.532 2035 | 8.535 9015 | 8.539 5683 | 58 |
| 3  | 8.520 9808 | 8.524 7749 | 8.528 5363 | 8.532 2654 | 8.535 9629 | 8.539 6292 | 57 |
| 4  | 8.521 0443 | 8.524 8379 | 8.528 5987 | 8.532 3273 | 8.536 0242 | 8.539 6900 | 56 |
| 5  | 8.521 1078 | 8.524 9008 | 8.528 6611 | 8.532 3892 | 8.536 0856 | 8.539 7509 | 55 |
| 6  | 8.521 1713 | 8.524 9638 | 8.528 7235 | 8.532 4510 | 8.536 1469 | 8.539 8117 | 54 |
| 7  | 8.521 2348 | 8.525 0267 | 8.528 7859 | 8.532 5129 | 8.536 2082 | 8.539 8725 | 53 |
| 8  | 8.521 2982 | 8.525 0896 | 8.528 8483 | 8.532 5747 | 8.536 2696 | 8.539 9333 | 52 |
| 9  | 8.521 3617 | 8.525 1525 | 8.528 9106 | 8.532 6366 | 8.536 3309 | 8.539 9941 | 51 |
| 10 | 8.521 4251 | 8.525 2154 | 8.529 9730 | 8.532 6984 | 8.536 3922 | 8.540 0549 | 50 |
| 11 | 8.521 4886 | 8.525 2783 | 8.529 0353 | 8.532 7602 | 8.536 4535 | 8.540 1157 | 49 |
| 12 | 8.521 5520 | 8.525 3412 | 8.529 0977 | 8.532 8220 | 8.536 5148 | 8.540 1765 | 48 |
| 13 | 8.521 6154 | 8.525 4041 | 8.529 1600 | 8.532 8838 | 8.536 5761 | 8.540 2372 | 47 |
| 14 | 8.521 6789 | 8.525 4669 | 8.529 2223 | 8.532 9456 | 8.536 6373 | 8.540 2980 | 46 |
| 15 | 8.521 7423 | 8.525 5298 | 8.529 2847 | 8.533 0074 | 8.536 6986 | 8.540 3587 | 45 |
| 16 | 8.521 8057 | 8.525 5926 | 8.529 3470 | 8.533 0692 | 8.536 7599 | 8.540 4195 | 44 |
| 17 | 8.521 8690 | 8.525 6555 | 8.529 4093 | 8.533 1310 | 8.536 8211 | 8.540 4802 | 43 |
| 18 | 8.521 9324 | 8.525 7183 | 8.529 4716 | 8.533 1927 | 8.536 8823 | 8.540 5409 | 42 |
| 19 | 8.521 9958 | 8.525 7811 | 8.529 5338 | 8.533 2545 | 8.536 9436 | 8.540 6017 | 41 |
| 20 | 8.522 0591 | 8.525 8439 | 8.529 5961 | 8.533 3162 | 8.537 0048 | 8.540 6624 | 40 |
| 21 | 8.522 1225 | 8.525 9067 | 8.529 6584 | 8.533 3779 | 8.537 0660 | 8.540 7231 | 39 |
| 22 | 8.522 1858 | 8.525 9695 | 8.529 7206 | 8.533 4397 | 8.537 1272 | 8.540 7838 | 38 |
| 23 | 8.522 2492 | 8.526 0323 | 8.529 7829 | 8.533 5014 | 8.537 1884 | 8.540 8445 | 37 |
| 24 | 8.522 3125 | 8.526 0951 | 8.529 8451 | 8.533 5631 | 8.537 2496 | 8.540 9051 | 36 |
| 25 | 8.522 3758 | 8.526 1579 | 8.529 9073 | 8.533 6248 | 8.537 3108 | 8.540 9658 | 35 |
| 26 | 8.522 4391 | 8.526 2206 | 8.529 9696 | 8.533 6865 | 8.537 3719 | 8.541 0264 | 34 |
| 27 | 8.522 5024 | 8.526 2834 | 8.530 0318 | 8.533 7482 | 8.537 4331 | 8.541 0871 | 33 |
| 28 | 8.522 5657 | 8.526 3461 | 8.530 0940 | 8.533 8098 | 8.537 4942 | 8.541 1477 | 32 |
| 29 | 8.522 6290 | 8.526 4088 | 8.530 1562 | 8.533 8715 | 8.537 5554 | 8.541 2084 | 31 |
| 30 | 8.522 6922 | 8.526 4716 | 8.530 2183 | 8.533 9331 | 8.537 6165 | 8.541 2690 | 30 |
| 31 | 8.522 7555 | 8.526 5343 | 8.530 2805 | 8.533 9948 | 8.537 6777 | 8.541 3296 | 29 |
| 32 | 8.522 8187 | 8.526 5970 | 8.530 3427 | 8.534 0564 | 8.537 7388 | 8.541 3902 | 28 |
| 33 | 8.522 8820 | 8.526 6597 | 8.530 4048 | 8.534 1181 | 8.537 7999 | 8.541 4508 | 27 |
| 34 | 8.522 9452 | 8.526 7223 | 8.530 4670 | 8.534 1797 | 8.537 8610 | 8.541 5114 | 26 |
| 35 | 8.523 0084 | 8.526 7850 | 8.530 5291 | 8.534 2413 | 8.537 9221 | 8.541 5720 | 25 |
| 36 | 8.523 0717 | 8.526 8477 | 8.530 5912 | 8.534 3029 | 8.537 9832 | 8.541 6326 | 24 |
| 37 | 8.523 1349 | 8.526 9103 | 8.530 6534 | 8.534 3645 | 8.538 0442 | 8.541 6931 | 23 |
| 38 | 8.523 1980 | 8.526 9730 | 8.530 7155 | 8.534 4261 | 8.538 1053 | 8.541 7537 | 22 |
| 39 | 8.523 2612 | 8.527 0356 | 8.530 7776 | 8.534 4876 | 8.538 1664 | 8.541 8142 | 21 |
| 40 | 8.523 3244 | 8.527 0983 | 8.530 8397 | 8.534 5492 | 8.538 2274 | 8.541 8748 | 20 |
| 41 | 8.523 3876 | 8.527 1609 | 8.530 9018 | 8.534 6108 | 8.538 2884 | 8.541 9353 | 19 |
| 42 | 8.523 4507 | 8.527 2235 | 8.530 9638 | 8.534 6723 | 8.538 3495 | 8.541 9958 | 18 |
| 43 | 8.523 5139 | 8.527 2861 | 8.531 0259 | 8.534 7339 | 8.538 4105 | 8.542 0563 | 17 |
| 44 | 8.523 5770 | 8.527 3487 | 8.531 0880 | 8.534 7954 | 8.538 4715 | 8.542 1168 | 16 |
| 45 | 8.523 6401 | 8.527 4113 | 8.531 1500 | 8.534 8569 | 8.538 5325 | 8.542 1773 | 15 |
| 46 | 8.523 7033 | 8.527 4739 | 8.531 2121 | 8.534 9184 | 8.538 5935 | 8.542 2378 | 14 |
| 47 | 8.523 7664 | 8.527 5364 | 8.531 2741 | 8.534 9799 | 8.538 6545 | 8.542 2983 | 13 |
| 48 | 8.523 8295 | 8.527 5990 | 8.531 3361 | 8.535 0414 | 8.538 7155 | 8.542 3588 | 12 |
| 49 | 8.523 8926 | 8.527 6615 | 8.531 3981 | 8.535 1029 | 8.538 7765 | 8.542 4193 | 11 |
| 50 | 8.523 9557 | 8.527 7241 | 8.531 4601 | 8.535 1644 | 8.538 8374 | 8.542 4797 | 10 |
| 51 | 8.524 0187 | 8.527 7866 | 8.531 5221 | 8.535 2259 | 8.538 8984 | 8.542 5402 | 9  |
| 52 | 8.524 0818 | 8.527 8491 | 8.531 5841 | 8.535 2873 | 8.538 9593 | 8.542 6006 | 8  |
| 53 | 8.524 1449 | 8.527 9116 | 8.531 6461 | 8.535 3488 | 8.539 0203 | 8.542 6610 | 7  |
| 54 | 8.524 2079 | 8.527 9741 | 8.531 7081 | 8.535 4102 | 8.539 0812 | 8.542 7214 | 6  |
| 55 | 8.524 2709 | 8.528 0366 | 8.531 7700 | 8.535 4717 | 8.539 1421 | 8.542 7819 | 5  |
| 56 | 8.524 3340 | 8.528 0991 | 8.531 8320 | 8.535 5331 | 8.539 2030 | 8.542 8423 | 4  |
| 57 | 8.524 3970 | 8.528 1616 | 8.531 8939 | 8.535 5945 | 8.539 2639 | 8.542 9027 | 3  |
| 58 | 8.524 4600 | 8.528 2241 | 8.531 9559 | 8.535 6559 | 8.539 3248 | 8.542 9631 | 2  |
| 59 | 8.524 5230 | 8.528 2865 | 8.532 0178 | 8.535 7173 | 8.539 3857 | 8.543 0234 | 1  |
| 60 | 8.524 5860 | 8.528 3490 | 8.532 0797 | 8.535 7787 | 8.539 4466 | 8.543 0838 | 0  |
| "  | 5'         | 4'         | 3'         | 2'         | 1'         | 0'         | "  |



| "  | 0'         | 1'         | 2'         | 3'         | 4'         | 5'         | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.542 8192 | 8.546 4218 | 8.549 9948 | 8.553 5386 | 8.557 0536 | 8.560 5404 | 60 |
| 1  | 8.542 8795 | 8.546 4816 | 8.550 0541 | 8.553 5974 | 8.557 1120 | 8.560 5983 | 59 |
| 2  | 8.542 9397 | 8.546 5414 | 8.550 1134 | 8.553 6562 | 8.557 1703 | 8.560 6562 | 58 |
| 3  | 8.543 0000 | 8.546 6012 | 8.550 1727 | 8.553 7150 | 8.557 2286 | 8.560 7140 | 57 |
| 4  | 8.543 0603 | 8.546 6609 | 8.550 2319 | 8.553 7738 | 8.557 2870 | 8.560 7719 | 56 |
| 5  | 8.543 1205 | 8.546 7207 | 8.550 2912 | 8.553 8326 | 8.557 3453 | 8.560 8297 | 55 |
| 6  | 8.543 1808 | 8.546 7804 | 8.550 3505 | 8.553 8914 | 8.557 4036 | 8.560 8876 | 54 |
| 7  | 8.543 2410 | 8.546 8402 | 8.550 4097 | 8.553 9501 | 8.557 4619 | 8.560 9454 | 53 |
| 8  | 8.543 3012 | 8.546 8999 | 8.550 4690 | 8.554 0089 | 8.557 5202 | 8.561 0032 | 52 |
| 9  | 8.543 3615 | 8.546 9596 | 8.550 5282 | 8.554 0676 | 8.557 5784 | 8.561 0610 | 51 |
| 10 | 8.543 4217 | 8.547 0194 | 8.550 5874 | 8.554 1264 | 8.557 6367 | 8.561 1188 | 50 |
| 11 | 8.543 4819 | 8.547 0791 | 8.550 6466 | 8.554 1851 | 8.557 6950 | 8.561 1766 | 49 |
| 12 | 8.543 5421 | 8.547 1388 | 8.550 7059 | 8.554 2439 | 8.557 7532 | 8.561 2344 | 48 |
| 13 | 8.543 6023 | 8.547 1985 | 8.550 7651 | 8.554 3026 | 8.557 8115 | 8.561 2922 | 47 |
| 14 | 8.543 6625 | 8.547 2581 | 8.550 8243 | 8.554 3613 | 8.557 8697 | 8.561 3500 | 46 |
| 15 | 8.543 7226 | 8.547 3178 | 8.550 8834 | 8.554 4200 | 8.557 9280 | 8.561 4078 | 45 |
| 16 | 8.543 7828 | 8.547 3775 | 8.550 9426 | 8.554 4787 | 8.557 9862 | 8.561 4655 | 44 |
| 17 | 8.543 8430 | 8.547 4371 | 8.551 0018 | 8.554 5374 | 8.558 0444 | 8.561 5233 | 43 |
| 18 | 8.543 9031 | 8.547 4968 | 8.551 0610 | 8.554 5961 | 8.558 1026 | 8.561 5810 | 42 |
| 19 | 8.543 9632 | 8.547 5564 | 8.551 1201 | 8.554 6548 | 8.558 1608 | 8.561 6388 | 41 |
| 20 | 8.544 0234 | 8.547 6161 | 8.551 1793 | 8.554 7134 | 8.558 2190 | 8.561 6965 | 40 |
| 21 | 8.544 0835 | 8.547 6757 | 8.551 2384 | 8.554 7721 | 8.558 2772 | 8.561 7542 | 39 |
| 22 | 8.544 1436 | 8.547 7353 | 8.551 2975 | 8.554 8307 | 8.558 3354 | 8.561 8119 | 38 |
| 23 | 8.544 2037 | 8.547 7949 | 8.551 3567 | 8.554 8894 | 8.558 3935 | 8.561 8696 | 37 |
| 24 | 8.544 2638 | 8.547 8545 | 8.551 4158 | 8.554 9480 | 8.558 4517 | 8.561 9273 | 36 |
| 25 | 8.544 3239 | 8.547 9141 | 8.551 4749 | 8.555 0066 | 8.558 5099 | 8.561 9850 | 35 |
| 26 | 8.544 3840 | 8.547 9737 | 8.551 5340 | 8.555 0653 | 8.558 5680 | 8.562 0427 | 34 |
| 27 | 8.544 4441 | 8.548 0333 | 8.551 5931 | 8.555 1239 | 8.558 6262 | 8.562 1004 | 33 |
| 28 | 8.544 5041 | 8.548 0929 | 8.551 6522 | 8.555 1825 | 8.558 6843 | 8.562 1581 | 32 |
| 29 | 8.544 5642 | 8.548 1524 | 8.551 7112 | 8.555 2411 | 8.558 7424 | 8.562 2157 | 31 |
| 30 | 8.544 6242 | 8.548 2120 | 8.551 7703 | 8.555 2997 | 8.558 8005 | 8.562 2734 | 30 |
| 31 | 8.544 6843 | 8.548 2715 | 8.551 8294 | 8.555 3582 | 8.558 8586 | 8.562 3310 | 29 |
| 32 | 8.544 7443 | 8.548 3311 | 8.551 8884 | 8.555 4168 | 8.558 9167 | 8.562 3887 | 28 |
| 33 | 8.544 8043 | 8.548 3906 | 8.551 9474 | 8.555 4754 | 8.558 9748 | 8.562 4463 | 27 |
| 34 | 8.544 8643 | 8.548 4501 | 8.552 0065 | 8.555 5339 | 8.559 0329 | 8.562 5039 | 26 |
| 35 | 8.544 9243 | 8.548 5096 | 8.552 0655 | 8.555 5925 | 8.559 0910 | 8.562 5615 | 25 |
| 36 | 8.544 9843 | 8.548 5691 | 8.552 1245 | 8.555 6510 | 8.559 1491 | 8.562 6191 | 24 |
| 37 | 8.545 0443 | 8.548 6286 | 8.552 1835 | 8.555 7095 | 8.559 2071 | 8.562 6767 | 23 |
| 38 | 8.545 1043 | 8.548 6881 | 8.552 2425 | 8.555 7681 | 8.559 2652 | 8.562 7343 | 22 |
| 39 | 8.545 1643 | 8.548 7476 | 8.552 3015 | 8.555 8266 | 8.559 3232 | 8.562 7919 | 21 |
| 40 | 8.545 2241 | 8.548 8071 | 8.552 3605 | 8.555 8851 | 8.559 3813 | 8.562 8495 | 20 |
| 41 | 8.545 2842 | 8.548 8665 | 8.552 4195 | 8.555 9436 | 8.559 4393 | 8.562 9071 | 19 |
| 42 | 8.545 3442 | 8.548 9260 | 8.552 4785 | 8.556 0021 | 8.559 4973 | 8.562 9646 | 18 |
| 43 | 8.545 4041 | 8.548 9854 | 8.552 5374 | 8.556 0606 | 8.559 5553 | 8.563 0222 | 17 |
| 44 | 8.545 4640 | 8.549 0449 | 8.552 5964 | 8.556 1191 | 8.559 6134 | 8.563 0797 | 16 |
| 45 | 8.545 5240 | 8.549 1043 | 8.552 6553 | 8.556 1775 | 8.559 6714 | 8.563 1373 | 15 |
| 46 | 8.545 5839 | 8.549 1637 | 8.552 7143 | 8.556 2360 | 8.559 7293 | 8.563 1948 | 14 |
| 47 | 8.545 6438 | 8.549 2231 | 8.552 7732 | 8.556 2944 | 8.559 7873 | 8.563 2523 | 13 |
| 48 | 8.545 7037 | 8.549 2825 | 8.552 8321 | 8.556 3529 | 8.559 8453 | 8.563 3098 | 12 |
| 49 | 8.545 7636 | 8.549 3419 | 8.552 8910 | 8.556 4113 | 8.559 9033 | 8.563 3673 | 11 |
| 50 | 8.545 8234 | 8.549 4013 | 8.552 9499 | 8.556 4698 | 8.559 9612 | 8.563 4248 | 10 |
| 51 | 8.545 8833 | 8.549 4607 | 8.553 0088 | 8.556 5282 | 8.560 0192 | 8.563 4823 | 9  |
| 52 | 8.545 9432 | 8.549 5201 | 8.553 0677 | 8.556 5866 | 8.560 0771 | 8.563 5398 | 8  |
| 53 | 8.546 0030 | 8.549 5795 | 8.553 1266 | 8.556 6450 | 8.560 1351 | 8.563 5973 | 7  |
| 54 | 8.546 0629 | 8.549 6388 | 8.553 1855 | 8.556 7034 | 8.560 1930 | 8.563 6548 | 6  |
| 55 | 8.546 1227 | 8.549 6982 | 8.553 2444 | 8.556 7618 | 8.560 2509 | 8.563 7122 | 5  |
| 56 | 8.546 1826 | 8.549 7575 | 8.553 3032 | 8.556 8202 | 8.560 3088 | 8.563 7697 | 4  |
| 57 | 8.546 2424 | 8.549 8168 | 8.553 3621 | 8.556 8785 | 8.560 3668 | 8.563 8271 | 3  |
| 58 | 8.546 3022 | 8.549 8762 | 8.553 4209 | 8.556 9369 | 8.560 4247 | 8.563 8846 | 2  |
| 59 | 8.546 3620 | 8.549 9355 | 8.553 4797 | 8.556 9953 | 8.560 4825 | 8.563 9420 | 1  |
| 60 | 8.546 4218 | 8.549 9948 | 8.553 5386 | 8.557 0536 | 8.560 5404 | 8.563 9994 | 0  |
| "  | 59'        | 58'        | 57'        | 56'        | 55'        | 54'        | "  |



tang 2°

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| "  | 0'         | 1'         | 2'         | 3'         | 4'         | 5'         | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.543 0838 | 8.546 6909 | 8.550 2683 | 8.553 8166 | 8.557 3362 | 8.560 8276 | 60 |
| 1  | 8.543 1442 | 8.546 7507 | 8.550 3277 | 8.553 8755 | 8.557 3946 | 8.560 8855 | 59 |
| 2  | 8.543 2045 | 8.546 8106 | 8.550 3871 | 8.553 9344 | 8.557 4530 | 8.560 9435 | 58 |
| 3  | 8.543 2649 | 8.546 8705 | 8.550 4464 | 8.553 9933 | 8.557 5114 | 8.561 0014 | 57 |
| 4  | 8.543 3252 | 8.546 9303 | 8.550 5058 | 8.554 0521 | 8.557 5698 | 8.561 0594 | 56 |
| 5  | 8.543 3855 | 8.546 9901 | 8.550 5651 | 8.554 1110 | 8.557 6282 | 8.561 1173 | 55 |
| 6  | 8.543 4459 | 8.547 0500 | 8.550 6245 | 8.554 1698 | 8.557 6866 | 8.561 1752 | 54 |
| 7  | 8.543 5062 | 8.547 1098 | 8.550 6838 | 8.554 2287 | 8.557 7450 | 8.561 2331 | 53 |
| 8  | 8.543 5665 | 8.547 1696 | 8.550 7431 | 8.554 2875 | 8.557 8033 | 8.561 2910 | 52 |
| 9  | 8.543 6268 | 8.547 2294 | 8.550 8024 | 8.554 3464 | 8.557 8617 | 8.561 3489 | 51 |
| 10 | 8.543 6871 | 8.547 2892 | 8.550 8617 | 8.554 4052 | 8.557 9201 | 8.561 4068 | 50 |
| 11 | 8.543 7473 | 8.547 3490 | 8.550 9210 | 8.554 4640 | 8.557 9784 | 8.561 4646 | 49 |
| 12 | 8.543 8076 | 8.547 4087 | 8.550 9803 | 8.554 5228 | 8.558 0367 | 8.561 5225 | 48 |
| 13 | 8.543 8679 | 8.547 4685 | 8.551 0396 | 8.554 5816 | 8.558 0951 | 8.561 5804 | 47 |
| 14 | 8.543 9281 | 8.547 5283 | 8.551 0988 | 8.554 6404 | 8.558 1534 | 8.561 6382 | 46 |
| 15 | 8.543 9884 | 8.547 5880 | 8.551 1581 | 8.554 6992 | 8.558 2117 | 8.561 6961 | 45 |
| 16 | 8.544 0486 | 8.547 6477 | 8.551 2174 | 8.554 7580 | 8.558 2700 | 8.561 7539 | 44 |
| 17 | 8.544 1088 | 8.547 7075 | 8.551 2766 | 8.554 8167 | 8.558 3283 | 8.561 8117 | 43 |
| 18 | 8.544 1691 | 8.547 7672 | 8.551 3358 | 8.554 8755 | 8.558 3866 | 8.561 8696 | 42 |
| 19 | 8.544 2293 | 8.547 8269 | 8.551 3951 | 8.554 9342 | 8.558 4448 | 8.561 9274 | 41 |
| 20 | 8.544 2895 | 8.547 8866 | 8.551 4543 | 8.554 9930 | 8.558 5031 | 8.561 9852 | 40 |
| 21 | 8.544 3497 | 8.547 9463 | 8.551 5135 | 8.555 0517 | 8.558 5614 | 8.562 0430 | 39 |
| 22 | 8.544 4099 | 8.548 0060 | 8.551 5727 | 8.555 1104 | 8.558 6196 | 8.562 1008 | 38 |
| 23 | 8.544 4701 | 8.548 0657 | 8.551 6319 | 8.555 1692 | 8.558 6779 | 8.562 1586 | 37 |
| 24 | 8.544 5302 | 8.548 1254 | 8.551 6911 | 8.555 2279 | 8.558 7361 | 8.562 2163 | 36 |
| 25 | 8.544 5904 | 8.548 1851 | 8.551 7503 | 8.555 2866 | 8.558 7944 | 8.562 2741 | 35 |
| 26 | 8.544 6505 | 8.548 2447 | 8.551 8095 | 8.555 3453 | 8.558 8526 | 8.562 3319 | 34 |
| 27 | 8.544 7107 | 8.548 3044 | 8.551 8686 | 8.555 4039 | 8.558 9108 | 8.562 3896 | 33 |
| 28 | 8.544 7708 | 8.548 3640 | 8.551 9278 | 8.555 4626 | 8.558 9690 | 8.562 4474 | 32 |
| 29 | 8.544 8310 | 8.548 4236 | 8.551 9869 | 8.555 5213 | 8.559 0272 | 8.562 5051 | 31 |
| 30 | 8.544 8911 | 8.548 4833 | 8.552 0461 | 8.555 5800 | 8.559 0854 | 8.562 5628 | 30 |
| 31 | 8.544 9512 | 8.548 5429 | 8.552 1052 | 8.555 6386 | 8.559 1436 | 8.562 6206 | 29 |
| 32 | 8.545 0113 | 8.548 6025 | 8.552 1643 | 8.555 6973 | 8.559 2018 | 8.562 6783 | 28 |
| 33 | 8.545 0714 | 8.548 6621 | 8.552 2235 | 8.555 7559 | 8.559 2599 | 8.562 7360 | 27 |
| 34 | 8.545 1315 | 8.548 7217 | 8.552 2826 | 8.555 8145 | 8.559 3181 | 8.562 7937 | 26 |
| 35 | 8.545 1916 | 8.548 7813 | 8.552 3417 | 8.555 8732 | 8.559 3762 | 8.562 8514 | 25 |
| 36 | 8.545 2516 | 8.548 8409 | 8.552 4008 | 8.555 9318 | 8.559 4344 | 8.562 9091 | 24 |
| 37 | 8.545 3117 | 8.548 9004 | 8.552 4598 | 8.555 9904 | 8.559 4925 | 8.562 9667 | 23 |
| 38 | 8.545 3718 | 8.548 9600 | 8.552 5189 | 8.556 0490 | 8.559 5507 | 8.563 0244 | 22 |
| 39 | 8.545 4318 | 8.549 0196 | 8.552 5780 | 8.556 1076 | 8.559 6088 | 8.563 0821 | 21 |
| 40 | 8.545 4918 | 8.549 0791 | 8.552 6371 | 8.556 1662 | 8.559 6669 | 8.563 1397 | 20 |
| 41 | 8.545 5519 | 8.549 1386 | 8.552 6961 | 8.556 2247 | 8.559 7250 | 8.563 1974 | 19 |
| 42 | 8.545 6119 | 8.549 1982 | 8.552 7552 | 8.556 2833 | 8.559 7831 | 8.563 2550 | 18 |
| 43 | 8.545 6719 | 8.549 2577 | 8.552 8142 | 8.556 3419 | 8.559 8412 | 8.563 3126 | 17 |
| 44 | 8.545 7319 | 8.549 3172 | 8.552 8732 | 8.556 4004 | 8.559 8993 | 8.563 3703 | 16 |
| 45 | 8.545 7919 | 8.549 3767 | 8.552 9322 | 8.556 4590 | 8.559 9574 | 8.563 4279 | 15 |
| 46 | 8.545 8519 | 8.549 4362 | 8.552 9913 | 8.556 5175 | 8.560 0154 | 8.563 4855 | 14 |
| 47 | 8.545 9119 | 8.549 4957 | 8.553 0503 | 8.556 5760 | 8.560 0735 | 8.563 5431 | 13 |
| 48 | 8.545 9719 | 8.549 5552 | 8.553 1093 | 8.556 6346 | 8.560 1315 | 8.563 6007 | 12 |
| 49 | 8.546 0318 | 8.549 6147 | 8.553 1682 | 8.556 6931 | 8.560 1896 | 8.563 6583 | 11 |
| 50 | 8.546 0918 | 8.549 6741 | 8.553 2272 | 8.556 7516 | 8.560 2476 | 8.563 7158 | 10 |
| 51 | 8.546 1517 | 8.549 7336 | 8.553 2862 | 8.556 8101 | 8.560 3057 | 8.563 7734 | 9  |
| 52 | 8.546 2117 | 8.549 7930 | 8.553 3452 | 8.556 8686 | 8.560 3637 | 8.563 8310 | 8  |
| 53 | 8.546 2716 | 8.549 8525 | 8.553 4041 | 8.556 9270 | 8.560 4217 | 8.563 8885 | 7  |
| 54 | 8.546 3315 | 8.549 9119 | 8.553 4631 | 8.556 9855 | 8.560 4797 | 8.563 9461 | 6  |
| 55 | 8.546 3914 | 8.549 9713 | 8.553 5220 | 8.557 0440 | 8.560 5377 | 8.564 0036 | 5  |
| 56 | 8.546 4513 | 8.550 0307 | 8.553 5810 | 8.557 1024 | 8.560 5957 | 8.564 0611 | 4  |
| 57 | 8.546 5112 | 8.550 0901 | 8.553 6399 | 8.557 1609 | 8.560 6537 | 8.564 1187 | 3  |
| 58 | 8.546 5711 | 8.550 1495 | 8.553 6988 | 8.557 2193 | 8.560 7117 | 8.564 1762 | 2  |
| 59 | 8.546 6310 | 8.550 2089 | 8.553 7577 | 8.557 2778 | 8.560 7696 | 8.564 2337 | 1  |
| 60 | 8.546 6909 | 8.550 2683 | 8.553 8166 | 8.557 3362 | 8.560 8276 | 8.564 2912 | 0  |
| "  | 59'        | 58'        | 57'        | 56'        | 55'        | 54'        | "  |

cotg 87°



| "  | 6'         | 7'         | 8'         | 9'         | 10'        | 11'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.563 9994 | 8.567 4310 | 8.570 8357 | 8.574 2139 | 8.577 5660 | 8.580 8923 | 60 |
| 1  | 8.564 0568 | 8.567 4880 | 8.570 8923 | 8.574 2700 | 8.577 6216 | 8.580 9475 | 59 |
| 2  | 8.564 1142 | 8.567 5450 | 8.570 9488 | 8.574 3261 | 8.577 6772 | 8.581 0027 | 58 |
| 3  | 8.564 1716 | 8.567 6019 | 8.571 0053 | 8.574 3821 | 8.577 7329 | 8.581 0580 | 57 |
| 4  | 8.564 2290 | 8.567 6589 | 8.571 0618 | 8.574 4382 | 8.577 7885 | 8.581 1132 | 56 |
| 5  | 8.564 2864 | 8.567 7158 | 8.571 1183 | 8.574 4942 | 8.577 8441 | 8.581 1683 | 55 |
| 6  | 8.564 3438 | 8.567 7727 | 8.571 1747 | 8.574 5503 | 8.577 8997 | 8.581 2235 | 54 |
| 7  | 8.564 4012 | 8.567 8296 | 8.571 2312 | 8.574 6063 | 8.577 9553 | 8.581 2787 | 53 |
| 8  | 8.564 4585 | 8.567 8866 | 8.571 2877 | 8.574 6623 | 8.578 0109 | 8.581 3339 | 52 |
| 9  | 8.564 5159 | 8.567 9435 | 8.571 3441 | 8.574 7184 | 8.578 0665 | 8.581 3891 | 51 |
| 10 | 8.564 5732 | 8.568 0004 | 8.571 4006 | 8.574 7744 | 8.578 1221 | 8.581 4442 | 50 |
| 11 | 8.564 6306 | 8.568 0572 | 8.571 4570 | 8.574 8304 | 8.578 1777 | 8.581 4994 | 49 |
| 12 | 8.564 6879 | 8.568 1141 | 8.571 5135 | 8.574 8864 | 8.578 2333 | 8.581 5545 | 48 |
| 13 | 8.564 7452 | 8.568 1710 | 8.571 5699 | 8.574 9424 | 8.578 2888 | 8.581 6097 | 47 |
| 14 | 8.564 8026 | 8.568 2279 | 8.571 6263 | 8.574 9984 | 8.578 3444 | 8.581 6648 | 46 |
| 15 | 8.564 8599 | 8.568 2847 | 8.571 6827 | 8.575 0543 | 8.578 3999 | 8.581 7199 | 45 |
| 16 | 8.564 9172 | 8.568 3416 | 8.571 7392 | 8.575 1103 | 8.578 4555 | 8.581 7750 | 44 |
| 17 | 8.564 9745 | 8.568 3984 | 8.571 7956 | 8.575 1663 | 8.578 5110 | 8.581 8301 | 43 |
| 18 | 8.565 0318 | 8.568 4553 | 8.571 8520 | 8.575 2222 | 8.578 5665 | 8.581 8853 | 42 |
| 19 | 8.565 0890 | 8.568 5121 | 8.571 9083 | 8.575 2782 | 8.578 6221 | 8.581 9404 | 41 |
| 20 | 8.565 1463 | 8.568 5689 | 8.571 9647 | 8.575 3341 | 8.578 6776 | 8.581 9954 | 40 |
| 21 | 8.565 2036 | 8.568 6257 | 8.572 0211 | 8.575 3901 | 8.578 7331 | 8.582 0505 | 39 |
| 22 | 8.565 2608 | 8.568 6825 | 8.572 0775 | 8.575 4460 | 8.578 7886 | 8.582 1056 | 38 |
| 23 | 8.565 3181 | 8.568 7393 | 8.572 1338 | 8.575 5019 | 8.578 8441 | 8.582 1607 | 37 |
| 24 | 8.565 3753 | 8.568 7961 | 8.572 1902 | 8.575 5578 | 8.578 8996 | 8.582 2157 | 36 |
| 25 | 8.565 4326 | 8.568 8529 | 8.572 2465 | 8.575 6137 | 8.578 9550 | 8.582 2708 | 35 |
| 26 | 8.565 4898 | 8.568 9097 | 8.572 3028 | 8.575 6696 | 8.579 0105 | 8.582 3258 | 34 |
| 27 | 8.565 5470 | 8.568 9665 | 8.572 3592 | 8.575 7255 | 8.579 0660 | 8.582 3809 | 33 |
| 28 | 8.565 6042 | 8.569 0232 | 8.572 4155 | 8.575 7814 | 8.579 1214 | 8.582 4359 | 32 |
| 29 | 8.565 6614 | 8.569 0800 | 8.572 4718 | 8.575 8373 | 8.579 1769 | 8.582 4909 | 31 |
| 30 | 8.565 7186 | 8.569 1367 | 8.572 5281 | 8.575 8932 | 8.579 2323 | 8.582 5460 | 30 |
| 31 | 8.565 7758 | 8.569 1935 | 8.572 5844 | 8.575 9490 | 8.579 2878 | 8.582 6010 | 29 |
| 32 | 8.565 8330 | 8.569 2502 | 8.572 6407 | 8.576 0049 | 8.579 3432 | 8.582 6560 | 28 |
| 33 | 8.565 8902 | 8.569 3069 | 8.572 6970 | 8.576 0607 | 8.579 3986 | 8.582 7110 | 27 |
| 34 | 8.565 9473 | 8.569 3637 | 8.572 7533 | 8.576 1166 | 8.579 4540 | 8.582 7660 | 26 |
| 35 | 8.566 0045 | 8.569 4204 | 8.572 8095 | 8.576 1724 | 8.579 5094 | 8.582 8210 | 25 |
| 36 | 8.566 0617 | 8.569 4771 | 8.572 8658 | 8.576 2282 | 8.579 5648 | 8.582 8759 | 24 |
| 37 | 8.566 1188 | 8.569 5338 | 8.572 9220 | 8.576 2841 | 8.579 6202 | 8.582 9309 | 23 |
| 38 | 8.566 1759 | 8.569 5905 | 8.572 9783 | 8.576 3399 | 8.579 6756 | 8.582 9859 | 22 |
| 39 | 8.566 2331 | 8.569 6471 | 8.573 0345 | 8.576 3957 | 8.579 7310 | 8.583 0408 | 21 |
| 40 | 8.566 2902 | 8.569 7038 | 8.573 0908 | 8.576 4515 | 8.579 7864 | 8.583 0958 | 20 |
| 41 | 8.566 3473 | 8.569 7605 | 8.573 1470 | 8.576 5073 | 8.579 8417 | 8.583 1507 | 19 |
| 42 | 8.566 4044 | 8.569 8171 | 8.573 2032 | 8.576 5631 | 8.579 8971 | 8.583 2057 | 18 |
| 43 | 8.566 4615 | 8.569 8738 | 8.573 2594 | 8.576 6188 | 8.579 9524 | 8.583 2606 | 17 |
| 44 | 8.566 5186 | 8.569 9304 | 8.573 3156 | 8.576 6746 | 8.580 0078 | 8.583 3155 | 16 |
| 45 | 8.566 5757 | 8.569 9871 | 8.573 3718 | 8.576 7304 | 8.580 0631 | 8.583 3704 | 15 |
| 46 | 8.566 6328 | 8.570 0437 | 8.573 4280 | 8.576 7861 | 8.580 1184 | 8.583 4253 | 14 |
| 47 | 8.566 6898 | 8.570 1003 | 8.573 4842 | 8.576 8419 | 8.580 1738 | 8.583 4802 | 13 |
| 48 | 8.566 7469 | 8.570 1569 | 8.573 5404 | 8.576 8976 | 8.580 2291 | 8.583 5351 | 12 |
| 49 | 8.566 8039 | 8.570 2135 | 8.573 5965 | 8.576 9533 | 8.580 2844 | 8.583 5900 | 11 |
| 50 | 8.566 8610 | 8.570 2701 | 8.573 6527 | 8.577 0091 | 8.580 3397 | 8.583 6449 | 10 |
| 51 | 8.566 9180 | 8.570 3267 | 8.573 7089 | 8.577 0648 | 8.580 3950 | 8.583 6998 | 9  |
| 52 | 8.566 9751 | 8.570 3833 | 8.573 7650 | 8.577 1205 | 8.580 4503 | 8.583 7546 | 8  |
| 53 | 8.567 0321 | 8.570 4399 | 8.573 8211 | 8.577 1762 | 8.580 5055 | 8.583 8095 | 7  |
| 54 | 8.567 0891 | 8.570 4965 | 8.573 8773 | 8.577 2319 | 8.580 5608 | 8.583 8644 | 6  |
| 55 | 8.567 1461 | 8.570 5530 | 8.573 9334 | 8.577 2876 | 8.580 6161 | 8.583 9192 | 5  |
| 56 | 8.567 2031 | 8.570 6096 | 8.573 9895 | 8.577 3433 | 8.580 6713 | 8.583 9740 | 4  |
| 57 | 8.567 2601 | 8.570 6661 | 8.574 0456 | 8.577 3990 | 8.580 7266 | 8.584 0289 | 3  |
| 58 | 8.567 3171 | 8.570 7227 | 8.574 1017 | 8.577 4546 | 8.580 7818 | 8.584 0837 | 2  |
| 59 | 8.567 3741 | 8.570 7792 | 8.574 1578 | 8.577 5103 | 8.580 8371 | 8.584 1385 | 1  |
| 60 | 8.567 4310 | 8.570 8357 | 8.574 2139 | 8.577 5660 | 8.580 8923 | 8.584 1933 | 0  |
| "  | 58'        | 52'        | 51'        | 50'        | 49'        | 48'        | "  |



| "  | 6'         | 7'         | 8'         | 9'         | 10'        | 11'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.564 2912 | 8.567 7275 | 8.571 1368 | 8.574 5197 | 8.577 8766 | 8.581 2077 | 60 |
| 1  | 8.564 3487 | 8.567 7845 | 8.571 1934 | 8.574 5759 | 8.577 9323 | 8.581 2630 | 59 |
| 2  | 8.564 4062 | 8.567 8415 | 8.571 2500 | 8.574 6320 | 8.577 9880 | 8.581 3183 | 58 |
| 3  | 8.564 4637 | 8.567 8986 | 8.571 3066 | 8.574 6882 | 8.578 0437 | 8.581 3736 | 57 |
| 4  | 8.564 5211 | 8.567 9556 | 8.571 3632 | 8.574 7443 | 8.578 0994 | 8.581 4289 | 56 |
| 5  | 8.564 5786 | 8.568 0126 | 8.571 4198 | 8.574 8005 | 8.578 1551 | 8.581 4841 | 55 |
| 6  | 8.564 6360 | 8.568 0696 | 8.571 4763 | 8.574 8566 | 8.578 2108 | 8.581 5394 | 54 |
| 7  | 8.564 6935 | 8.568 1266 | 8.571 5329 | 8.574 9127 | 8.578 2665 | 8.581 5947 | 53 |
| 8  | 8.564 7509 | 8.568 1836 | 8.571 5894 | 8.574 9688 | 8.578 3222 | 8.581 6499 | 52 |
| 9  | 8.564 8084 | 8.568 2406 | 8.571 6460 | 8.575 0249 | 8.578 3779 | 8.581 7052 | 51 |
| 10 | 8.564 8658 | 8.568 2976 | 8.571 7025 | 8.575 0810 | 8.578 4335 | 8.581 7604 | 50 |
| 11 | 8.564 9232 | 8.568 3545 | 8.571 7590 | 8.575 1371 | 8.578 4892 | 8.581 8157 | 49 |
| 12 | 8.564 9806 | 8.568 4115 | 8.571 8155 | 8.575 1932 | 8.578 5448 | 8.581 8709 | 48 |
| 13 | 8.565 0380 | 8.568 4684 | 8.571 8720 | 8.575 2492 | 8.578 6005 | 8.581 9261 | 47 |
| 14 | 8.565 0954 | 8.568 5254 | 8.571 9285 | 8.575 3053 | 8.578 6561 | 8.581 9813 | 46 |
| 15 | 8.565 1528 | 8.568 5823 | 8.571 9850 | 8.575 3614 | 8.578 7117 | 8.582 0365 | 45 |
| 16 | 8.565 2102 | 8.568 6393 | 8.572 0415 | 8.575 4174 | 8.578 7674 | 8.582 0917 | 44 |
| 17 | 8.565 2676 | 8.568 6962 | 8.572 0980 | 8.575 4735 | 8.578 8230 | 8.582 1469 | 43 |
| 18 | 8.565 3249 | 8.568 7531 | 8.572 1545 | 8.575 5295 | 8.578 8786 | 8.582 2021 | 42 |
| 19 | 8.565 3823 | 8.568 8100 | 8.572 2109 | 8.575 5855 | 8.578 9342 | 8.582 2573 | 41 |
| 20 | 8.565 4396 | 8.568 8669 | 8.572 2674 | 8.575 6416 | 8.578 9898 | 8.582 3124 | 40 |
| 21 | 8.565 4970 | 8.568 9238 | 8.572 3238 | 8.575 6976 | 8.579 0454 | 8.582 3676 | 39 |
| 22 | 8.565 5543 | 8.568 9807 | 8.572 3803 | 8.575 7536 | 8.579 1009 | 8.582 4228 | 38 |
| 23 | 8.565 6116 | 8.569 0376 | 8.572 4367 | 8.575 8096 | 8.579 1565 | 8.582 4779 | 37 |
| 24 | 8.565 6690 | 8.569 0944 | 8.572 4932 | 8.575 8656 | 8.579 2121 | 8.582 5331 | 36 |
| 25 | 8.565 7263 | 8.569 1513 | 8.572 5496 | 8.575 9216 | 8.579 2676 | 8.582 5882 | 35 |
| 26 | 8.565 7836 | 8.569 2081 | 8.572 6060 | 8.575 9775 | 8.579 3232 | 8.582 6433 | 34 |
| 27 | 8.565 8409 | 8.569 2650 | 8.572 6624 | 8.576 0335 | 8.579 3787 | 8.582 6984 | 33 |
| 28 | 8.565 8982 | 8.569 3218 | 8.572 7188 | 8.576 0895 | 8.579 4343 | 8.582 7536 | 32 |
| 29 | 8.565 9554 | 8.569 3787 | 8.572 7752 | 8.576 1454 | 8.579 4898 | 8.582 8087 | 31 |
| 30 | 8.566 0127 | 8.569 4355 | 8.572 8316 | 8.576 2014 | 8.579 5453 | 8.582 8638 | 30 |
| 31 | 8.566 0700 | 8.569 4923 | 8.572 8880 | 8.576 2573 | 8.579 6008 | 8.582 9189 | 29 |
| 32 | 8.566 1272 | 8.569 5491 | 8.572 9443 | 8.576 3133 | 8.579 6563 | 8.582 9739 | 28 |
| 33 | 8.566 1845 | 8.569 6059 | 8.573 0007 | 8.576 3692 | 8.579 7118 | 8.583 0290 | 27 |
| 34 | 8.566 2417 | 8.569 6627 | 8.573 0570 | 8.576 4251 | 8.579 7673 | 8.583 0841 | 26 |
| 35 | 8.566 2990 | 8.569 7195 | 8.573 1134 | 8.576 4810 | 8.579 8228 | 8.583 1392 | 25 |
| 36 | 8.566 3562 | 8.569 7763 | 8.573 1697 | 8.576 5369 | 8.579 8783 | 8.583 1942 | 24 |
| 37 | 8.566 4134 | 8.569 8331 | 8.573 2261 | 8.576 5928 | 8.579 9338 | 8.583 2493 | 23 |
| 38 | 8.566 4706 | 8.569 8898 | 8.573 2824 | 8.576 6487 | 8.579 9892 | 8.583 3043 | 22 |
| 39 | 8.566 5279 | 8.569 9466 | 8.573 3387 | 8.576 7046 | 8.580 0447 | 8.583 3594 | 21 |
| 40 | 8.566 5851 | 8.570 0034 | 8.573 3950 | 8.576 7605 | 8.580 1001 | 8.583 4144 | 20 |
| 41 | 8.566 6422 | 8.570 0601 | 8.573 4513 | 8.576 8164 | 8.580 1556 | 8.583 4694 | 19 |
| 42 | 8.566 6994 | 8.570 1168 | 8.573 5076 | 8.576 8722 | 8.580 2110 | 8.583 5244 | 18 |
| 43 | 8.566 7566 | 8.570 1736 | 8.573 5639 | 8.576 9281 | 8.580 2665 | 8.583 5794 | 17 |
| 44 | 8.566 8138 | 8.570 2303 | 8.573 6202 | 8.576 9839 | 8.580 3219 | 8.583 6344 | 16 |
| 45 | 8.566 8709 | 8.570 2870 | 8.573 6765 | 8.577 0398 | 8.580 3773 | 8.583 6894 | 15 |
| 46 | 8.566 9281 | 8.570 3437 | 8.573 7327 | 8.577 0956 | 8.580 4327 | 8.583 7444 | 14 |
| 47 | 8.566 9852 | 8.570 4004 | 8.573 7890 | 8.577 1514 | 8.580 4881 | 8.583 7994 | 13 |
| 48 | 8.567 0424 | 8.570 4571 | 8.573 8453 | 8.577 2073 | 8.580 5435 | 8.583 8544 | 12 |
| 49 | 8.567 0995 | 8.570 5138 | 8.573 9015 | 8.577 2631 | 8.580 5989 | 8.583 9094 | 11 |
| 50 | 8.567 1566 | 8.570 5705 | 8.573 9577 | 8.577 3189 | 8.580 6543 | 8.583 9643 | 10 |
| 51 | 8.567 2138 | 8.570 6271 | 8.574 0140 | 8.577 3747 | 8.580 7096 | 8.584 0193 | 9  |
| 52 | 8.567 2709 | 8.570 6838 | 8.574 0702 | 8.577 4305 | 8.580 7650 | 8.584 0742 | 8  |
| 53 | 8.567 3280 | 8.570 7405 | 8.574 1264 | 8.577 4863 | 8.580 8204 | 8.584 1292 | 7  |
| 54 | 8.567 3851 | 8.570 7971 | 8.574 1826 | 8.577 5420 | 8.580 8757 | 8.584 1841 | 6  |
| 55 | 8.567 4421 | 8.570 8537 | 8.574 2388 | 8.577 5978 | 8.580 9311 | 8.584 2390 | 5  |
| 56 | 8.567 4992 | 8.570 9104 | 8.574 2950 | 8.577 6536 | 8.580 9864 | 8.584 2939 | 4  |
| 57 | 8.567 5563 | 8.570 9670 | 8.574 3512 | 8.577 7093 | 8.581 0417 | 8.584 3489 | 3  |
| 58 | 8.567 6134 | 8.571 0236 | 8.574 4074 | 8.577 7651 | 8.581 0971 | 8.584 4038 | 2  |
| 59 | 8.567 6704 | 8.571 0802 | 8.574 4636 | 8.577 8208 | 8.581 1524 | 8.584 4587 | 1  |
| 60 | 8.567 7275 | 8.571 1368 | 8.574 5197 | 8.577 8766 | 8.581 2077 | 8.584 5136 | 0  |
| "  | 53'        | 52'        | 51'        | 50'        | 49'        | 48'        | "  |

cotg 87°



| "  | 12'        | 13'        | 14'        | 15'        | 16'        | 17'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.584 1933 | 8.587 4694 | 8.590 7209 | 8.593 9483 | 8.597 1517 | 8.600 3317 | 60 |
| 1  | 8.584 2481 | 8.587 5238 | 8.590 7749 | 8.594 0018 | 8.597 2049 | 8.600 3845 | 59 |
| 2  | 8.584 3029 | 8.587 5782 | 8.590 8289 | 8.594 0554 | 8.597 2581 | 8.600 4373 | 58 |
| 3  | 8.584 3577 | 8.587 6326 | 8.590 8829 | 8.594 1090 | 8.597 3113 | 8.600 4901 | 57 |
| 4  | 8.584 4125 | 8.587 6869 | 8.590 9368 | 8.594 1626 | 8.597 3645 | 8.600 5429 | 56 |
| 5  | 8.584 4673 | 8.587 7413 | 8.590 9908 | 8.594 2161 | 8.597 4176 | 8.600 5957 | 55 |
| 6  | 8.584 5221 | 8.587 7957 | 8.591 0448 | 8.594 2697 | 8.597 4708 | 8.600 6484 | 54 |
| 7  | 8.584 5768 | 8.587 8500 | 8.591 0987 | 8.594 3232 | 8.597 5239 | 8.600 7012 | 53 |
| 8  | 8.584 6316 | 8.587 9044 | 8.591 1526 | 8.594 3768 | 8.597 5771 | 8.600 7540 | 52 |
| 9  | 8.584 6863 | 8.587 9587 | 8.591 2066 | 8.594 4303 | 8.597 6302 | 8.600 8067 | 51 |
| 10 | 8.584 7411 | 8.588 0130 | 8.591 2605 | 8.594 4838 | 8.597 6834 | 8.600 8595 | 50 |
| 11 | 8.584 7958 | 8.588 0674 | 8.591 3144 | 8.594 5373 | 8.597 7365 | 8.600 9122 | 49 |
| 12 | 8.584 8505 | 8.588 1217 | 8.591 3683 | 8.594 5908 | 8.597 7896 | 8.600 9649 | 48 |
| 13 | 8.584 9052 | 8.588 1760 | 8.591 4222 | 8.594 6444 | 8.597 8427 | 8.601 0177 | 47 |
| 14 | 8.584 9600 | 8.588 2303 | 8.591 4761 | 8.594 6979 | 8.597 8958 | 8.601 0704 | 46 |
| 15 | 8.585 0147 | 8.588 2846 | 8.591 5300 | 8.594 7513 | 8.597 9489 | 8.601 1231 | 45 |
| 16 | 8.585 0694 | 8.588 3389 | 8.591 5839 | 8.594 8048 | 8.598 0020 | 8.601 1758 | 44 |
| 17 | 8.585 1241 | 8.588 3932 | 8.591 6378 | 8.594 8583 | 8.598 0551 | 8.601 2285 | 43 |
| 18 | 8.585 1788 | 8.588 4474 | 8.591 6917 | 8.594 9118 | 8.598 1082 | 8.601 2812 | 42 |
| 19 | 8.585 2334 | 8.588 5017 | 8.591 7455 | 8.594 9653 | 8.598 1613 | 8.601 3339 | 41 |
| 20 | 8.585 2881 | 8.588 5560 | 8.591 7994 | 8.595 0187 | 8.598 2143 | 8.601 3866 | 40 |
| 21 | 8.585 3428 | 8.588 6102 | 8.591 8532 | 8.595 0722 | 8.598 2674 | 8.601 4392 | 39 |
| 22 | 8.585 3974 | 8.588 6645 | 8.591 9071 | 8.595 1256 | 8.598 3204 | 8.601 4919 | 38 |
| 23 | 8.585 4521 | 8.588 7187 | 8.591 9609 | 8.595 1791 | 8.598 3735 | 8.601 5446 | 37 |
| 24 | 8.585 5067 | 8.588 7729 | 8.592 0147 | 8.595 2325 | 8.598 4265 | 8.601 5972 | 36 |
| 25 | 8.585 5614 | 8.588 8272 | 8.592 0686 | 8.595 2859 | 8.598 4796 | 8.601 6499 | 35 |
| 26 | 8.585 6160 | 8.588 8814 | 8.592 1224 | 8.595 3393 | 8.598 5326 | 8.601 7025 | 34 |
| 27 | 8.585 6706 | 8.588 9356 | 8.592 1762 | 8.595 3928 | 8.598 5856 | 8.601 7551 | 33 |
| 28 | 8.585 7252 | 8.588 9898 | 8.592 2300 | 8.595 4462 | 8.598 6386 | 8.601 8078 | 32 |
| 29 | 8.585 7799 | 8.589 0440 | 8.592 2838 | 8.595 4996 | 8.598 6916 | 8.601 8604 | 31 |
| 30 | 8.585 8345 | 8.589 0982 | 8.592 3376 | 8.595 5530 | 8.598 7446 | 8.601 9130 | 30 |
| 31 | 8.585 8891 | 8.589 1524 | 8.592 3914 | 8.595 6063 | 8.598 7976 | 8.601 9656 | 29 |
| 32 | 8.585 9437 | 8.589 2066 | 8.592 4452 | 8.595 6597 | 8.598 8506 | 8.602 0182 | 28 |
| 33 | 8.585 9982 | 8.589 2608 | 8.592 4989 | 8.595 7131 | 8.598 9036 | 8.602 0708 | 27 |
| 34 | 8.586 0528 | 8.589 3149 | 8.592 5527 | 8.595 7665 | 8.598 9566 | 8.602 1234 | 26 |
| 35 | 8.586 1074 | 8.589 3691 | 8.592 6065 | 8.595 8198 | 8.599 0096 | 8.602 1760 | 25 |
| 36 | 8.586 1619 | 8.589 4233 | 8.592 6602 | 8.595 8732 | 8.599 0625 | 8.602 2286 | 24 |
| 37 | 8.586 2165 | 8.589 4774 | 8.592 7140 | 8.595 9265 | 8.599 1155 | 8.602 2812 | 23 |
| 38 | 8.586 2711 | 8.589 5315 | 8.592 7677 | 8.595 9799 | 8.599 1684 | 8.602 3337 | 22 |
| 39 | 8.586 3256 | 8.589 5857 | 8.592 8214 | 8.596 0332 | 8.599 2214 | 8.602 3863 | 21 |
| 40 | 8.586 3801 | 8.589 6398 | 8.592 8751 | 8.596 0865 | 8.599 2743 | 8.602 4388 | 20 |
| 41 | 8.586 4347 | 8.589 6939 | 8.592 9289 | 8.596 1399 | 8.599 3272 | 8.602 4914 | 19 |
| 42 | 8.586 4892 | 8.589 7480 | 8.592 9826 | 8.596 1932 | 8.599 3802 | 8.602 5439 | 18 |
| 43 | 8.586 5437 | 8.589 8021 | 8.593 0363 | 8.596 2465 | 8.599 4331 | 8.602 5965 | 17 |
| 44 | 8.586 5982 | 8.589 8562 | 8.593 0900 | 8.596 2998 | 8.599 4860 | 8.602 6490 | 16 |
| 45 | 8.586 6527 | 8.589 9103 | 8.593 1437 | 8.596 3531 | 8.599 5389 | 8.602 7015 | 15 |
| 46 | 8.586 7072 | 8.589 9644 | 8.593 1974 | 8.596 4064 | 8.599 5918 | 8.602 7540 | 14 |
| 47 | 8.586 7617 | 8.590 0185 | 8.593 2510 | 8.596 4597 | 8.599 6447 | 8.602 8065 | 13 |
| 48 | 8.586 8162 | 8.590 0726 | 8.593 3047 | 8.596 5129 | 8.599 6976 | 8.602 8590 | 12 |
| 49 | 8.586 8706 | 8.590 1266 | 8.593 3584 | 8.596 5662 | 8.599 7505 | 8.602 9115 | 11 |
| 50 | 8.586 9251 | 8.590 1807 | 8.593 4120 | 8.596 6195 | 8.599 8033 | 8.602 9640 | 10 |
| 51 | 8.586 9796 | 8.590 2348 | 8.593 4657 | 8.596 6727 | 8.599 8562 | 8.603 0165 | 9  |
| 52 | 8.587 0340 | 8.590 2888 | 8.593 5193 | 8.596 7260 | 8.599 9091 | 8.603 0690 | 8  |
| 53 | 8.587 0885 | 8.590 3428 | 8.593 5730 | 8.596 7792 | 8.599 9619 | 8.603 1214 | 7  |
| 54 | 8.587 1429 | 8.590 3969 | 8.593 6266 | 8.596 8325 | 8.600 0148 | 8.603 1739 | 6  |
| 55 | 8.587 1973 | 8.590 4509 | 8.593 6802 | 8.596 8857 | 8.600 0676 | 8.603 2264 | 5  |
| 56 | 8.587 2518 | 8.590 5049 | 8.593 7338 | 8.596 9389 | 8.600 1204 | 8.603 2788 | 4  |
| 57 | 8.587 3062 | 8.590 5589 | 8.593 7875 | 8.596 9921 | 8.600 1733 | 8.603 3313 | 3  |
| 58 | 8.587 3606 | 8.590 6129 | 8.593 8411 | 8.597 0453 | 8.600 2261 | 8.603 3837 | 2  |
| 59 | 8.587 4150 | 8.590 6669 | 8.593 8947 | 8.597 0985 | 8.600 2789 | 8.603 4361 | 1  |
| 60 | 8.587 4694 | 8.590 7209 | 8.593 9483 | 8.597 1517 | 8.600 3317 | 8.603 4886 | 0  |
| "  | 47'        | 46'        | 45'        | 44'        | 43'        | 42'        | "  |



| "  | 12'        | 13'        | 14'        | 15'        | 16'        | 17'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.584 5136 | 8.587 7945 | 8.591 0509 | 8.594 2832 | 8.597 4917 | 8.600 6767 | 60 |
| 1  | 8.584 5684 | 8.587 8490 | 8.591 1050 | 8.594 3369 | 8.597 5449 | 8.600 7296 | 59 |
| 2  | 8.584 6233 | 8.587 9035 | 8.591 1591 | 8.594 3905 | 8.597 5982 | 8.600 7824 | 58 |
| 3  | 8.584 6782 | 8.587 9579 | 8.591 2131 | 8.594 4442 | 8.597 6515 | 8.600 8353 | 57 |
| 4  | 8.584 7331 | 8.588 0124 | 8.591 2672 | 8.594 4978 | 8.597 7047 | 8.600 8882 | 56 |
| 5  | 8.584 7879 | 8.588 0668 | 8.591 3212 | 8.594 5515 | 8.597 7580 | 8.600 9410 | 55 |
| 6  | 8.584 8428 | 8.588 1213 | 8.591 3753 | 8.594 6051 | 8.597 8112 | 8.600 9939 | 54 |
| 7  | 8.584 8976 | 8.588 1757 | 8.591 4293 | 8.594 6588 | 8.597 8645 | 8.601 0468 | 53 |
| 8  | 8.584 9524 | 8.588 2301 | 8.591 4833 | 8.594 7124 | 8.597 9177 | 8.601 0996 | 52 |
| 9  | 8.585 0073 | 8.588 2845 | 8.591 5373 | 8.594 7660 | 8.597 9709 | 8.601 1524 | 51 |
| 10 | 8.585 0621 | 8.588 3389 | 8.591 5913 | 8.594 8196 | 8.598 0241 | 8.601 2053 | 50 |
| 11 | 8.585 1169 | 8.588 3934 | 8.591 6453 | 8.594 8732 | 8.598 0773 | 8.601 2581 | 49 |
| 12 | 8.585 1717 | 8.588 4478 | 8.591 6993 | 8.594 9268 | 8.598 1305 | 8.601 3109 | 48 |
| 13 | 8.585 2265 | 8.588 5021 | 8.591 7533 | 8.594 9804 | 8.598 1837 | 8.601 3637 | 47 |
| 14 | 8.585 2813 | 8.588 5565 | 8.591 8073 | 8.595 0340 | 8.598 2369 | 8.601 4165 | 46 |
| 15 | 8.585 3361 | 8.588 6109 | 8.591 8613 | 8.595 0875 | 8.598 2901 | 8.601 4693 | 45 |
| 16 | 8.585 3909 | 8.588 6653 | 8.591 9152 | 8.595 1411 | 8.598 3433 | 8.601 5221 | 44 |
| 17 | 8.585 4457 | 8.588 7196 | 8.591 9692 | 8.595 1947 | 8.598 3965 | 8.601 5749 | 43 |
| 18 | 8.585 5004 | 8.588 7740 | 8.592 0231 | 8.595 2482 | 8.598 4496 | 8.601 6277 | 42 |
| 19 | 8.585 5552 | 8.588 8284 | 8.592 0771 | 8.595 3018 | 8.598 5028 | 8.601 6804 | 41 |
| 20 | 8.585 6100 | 8.588 8827 | 8.592 1310 | 8.595 3553 | 8.598 5559 | 8.601 7332 | 40 |
| 21 | 8.585 6647 | 8.588 9370 | 8.592 1850 | 8.595 4089 | 8.598 6091 | 8.601 7860 | 39 |
| 22 | 8.585 7194 | 8.588 9914 | 8.592 2389 | 8.595 4624 | 8.598 6622 | 8.601 8387 | 38 |
| 23 | 8.585 7742 | 8.589 0457 | 8.592 2928 | 8.595 5159 | 8.598 7153 | 8.601 8915 | 37 |
| 24 | 8.585 8289 | 8.589 1000 | 8.592 3467 | 8.595 5694 | 8.598 7685 | 8.601 9442 | 36 |
| 25 | 8.585 8836 | 8.589 1543 | 8.592 4006 | 8.595 6229 | 8.598 8216 | 8.601 9969 | 35 |
| 26 | 8.585 9383 | 8.589 2086 | 8.592 4545 | 8.595 6764 | 8.598 8747 | 8.602 0496 | 34 |
| 27 | 8.585 9930 | 8.589 2629 | 8.592 5084 | 8.595 7299 | 8.598 9278 | 8.602 1024 | 33 |
| 28 | 8.586 0477 | 8.589 3172 | 8.592 5623 | 8.595 7834 | 8.598 9809 | 8.602 1551 | 32 |
| 29 | 8.586 1024 | 8.589 3715 | 8.592 6162 | 8.595 8369 | 8.599 0340 | 8.602 2078 | 31 |
| 30 | 8.586 1571 | 8.589 4258 | 8.592 6701 | 8.595 8904 | 8.599 0871 | 8.602 2605 | 30 |
| 31 | 8.586 2118 | 8.589 4800 | 8.592 7239 | 8.595 9439 | 8.599 1402 | 8.602 3132 | 29 |
| 32 | 8.586 2665 | 8.589 5343 | 8.592 7778 | 8.595 9973 | 8.599 1932 | 8.602 3659 | 28 |
| 33 | 8.586 3211 | 8.589 5886 | 8.592 8317 | 8.596 0508 | 8.599 2463 | 8.602 4186 | 27 |
| 34 | 8.586 3758 | 8.589 6428 | 8.592 8855 | 8.596 1042 | 8.599 2994 | 8.602 4712 | 26 |
| 35 | 8.586 4304 | 8.589 6971 | 8.592 9393 | 8.596 1577 | 8.599 3524 | 8.602 5239 | 25 |
| 36 | 8.586 4851 | 8.589 7513 | 8.592 9932 | 8.596 2111 | 8.599 4055 | 8.602 5766 | 24 |
| 37 | 8.586 5397 | 8.589 8055 | 8.593 0470 | 8.596 2646 | 8.599 4585 | 8.602 6292 | 23 |
| 38 | 8.586 5944 | 8.589 8597 | 8.593 1008 | 8.596 3180 | 8.599 5115 | 8.602 6819 | 22 |
| 39 | 8.586 6490 | 8.589 9140 | 8.593 1546 | 8.596 3714 | 8.599 5646 | 8.602 7345 | 21 |
| 40 | 8.586 7036 | 8.589 9682 | 8.593 2085 | 8.596 4248 | 8.599 6176 | 8.602 7872 | 20 |
| 41 | 8.586 7582 | 8.590 0224 | 8.593 2623 | 8.596 4782 | 8.599 6706 | 8.602 8398 | 19 |
| 42 | 8.586 8128 | 8.590 0766 | 8.593 3160 | 8.596 5316 | 8.599 7236 | 8.602 8924 | 18 |
| 43 | 8.586 8674 | 8.590 1308 | 8.593 3698 | 8.596 5850 | 8.599 7766 | 8.602 9450 | 17 |
| 44 | 8.586 9220 | 8.590 1849 | 8.593 4236 | 8.596 6384 | 8.599 8296 | 8.602 9976 | 16 |
| 45 | 8.586 9766 | 8.590 2391 | 8.593 4774 | 8.596 6918 | 8.599 8826 | 8.603 0502 | 15 |
| 46 | 8.587 0312 | 8.590 2933 | 8.593 5312 | 8.596 7451 | 8.599 9356 | 8.603 1028 | 14 |
| 47 | 8.587 0857 | 8.590 3474 | 8.593 5849 | 8.596 7985 | 8.599 9886 | 8.603 1554 | 13 |
| 48 | 8.587 1403 | 8.590 4016 | 8.593 6387 | 8.596 8519 | 8.600 0415 | 8.603 2080 | 12 |
| 49 | 8.587 1949 | 8.590 4558 | 8.593 6924 | 8.596 9052 | 8.600 0945 | 8.603 2606 | 11 |
| 50 | 8.587 2494 | 8.590 5099 | 8.593 7462 | 8.596 9586 | 8.600 1475 | 8.603 3132 | 10 |
| 51 | 8.587 3039 | 8.590 5640 | 8.593 7999 | 8.597 0119 | 8.600 2004 | 8.603 3657 | 9  |
| 52 | 8.587 3585 | 8.590 6182 | 8.593 8536 | 8.597 0652 | 8.600 2534 | 8.603 4183 | 8  |
| 53 | 8.587 4130 | 8.590 6723 | 8.593 9073 | 8.597 1186 | 8.600 3063 | 8.603 4709 | 7  |
| 54 | 8.587 4675 | 8.590 7264 | 8.593 9611 | 8.597 1719 | 8.600 3592 | 8.603 5234 | 6  |
| 55 | 8.587 5220 | 8.590 7805 | 8.594 0148 | 8.597 2252 | 8.600 4121 | 8.603 5760 | 5  |
| 56 | 8.587 5766 | 8.590 8346 | 8.594 0685 | 8.597 2785 | 8.600 4651 | 8.603 6285 | 4  |
| 57 | 8.587 6311 | 8.590 8887 | 8.594 1222 | 8.597 3318 | 8.600 5180 | 8.603 6810 | 3  |
| 58 | 8.587 6855 | 8.590 9428 | 8.594 1759 | 8.597 3851 | 8.600 5709 | 8.603 7335 | 2  |
| 59 | 8.587 7400 | 8.590 9969 | 8.594 2295 | 8.597 4384 | 8.600 6238 | 8.603 7861 | 1  |
| 60 | 8.587 7945 | 8.591 0509 | 8.594 2832 | 8.597 4917 | 8.600 6767 | 8.603 8386 | 0  |
| "  | 47'        | 48'        | 49'        | 44'        | 43'        | 42'        | "  |



| "  | 18'        | 19'        | 20'        | 21'        | 22'         | 23'         | "  |
|----|------------|------------|------------|------------|-------------|-------------|----|
| 0  | 8.603 4886 | 8.606 6226 | 8.609 7341 | 8.612 8213 | 8.615 8813  | 8.618 9160  | 60 |
| 1  | 8.603 5410 | 8.606 6746 | 8.609 7858 | 8.612 8735 | 8.615 9335  | 8.618 9682  | 59 |
| 2  | 8.603 5934 | 8.606 7267 | 8.609 8374 | 8.612 9259 | 8.615 9859  | 8.618 10159 | 58 |
| 3  | 8.603 6458 | 8.606 7787 | 8.609 8891 | 8.612 9774 | 8.615 10368 | 8.618 10968 | 57 |
| 4  | 8.603 6982 | 8.606 8307 | 8.609 9407 | 8.613 0296 | 8.616 0896  | 8.619 1496  | 56 |
| 5  | 8.603 7506 | 8.606 8827 | 8.610 0921 | 8.613 0819 | 8.616 1419  | 8.619 2019  | 55 |
| 6  | 8.603 8030 | 8.606 9347 | 8.610 1440 | 8.613 1342 | 8.616 1942  | 8.619 2542  | 54 |
| 7  | 8.603 8554 | 8.606 9867 | 8.610 1957 | 8.613 1865 | 8.616 2465  | 8.619 3065  | 53 |
| 8  | 8.603 9077 | 8.607 0387 | 8.610 2471 | 8.613 2377 | 8.616 2977  | 8.619 3577  | 52 |
| 9  | 8.603 9601 | 8.607 0907 | 8.610 2989 | 8.613 2890 | 8.616 3490  | 8.619 4090  | 51 |
| 10 | 8.603 0125 | 8.607 1427 | 8.610 3505 | 8.613 3405 | 8.616 4005  | 8.619 4605  | 50 |
| 11 | 8.603 0648 | 8.607 1947 | 8.610 4021 | 8.613 3925 | 8.616 4525  | 8.619 5125  | 49 |
| 12 | 8.603 1172 | 8.607 2467 | 8.610 4537 | 8.613 4442 | 8.616 5042  | 8.619 5642  | 48 |
| 13 | 8.603 1695 | 8.607 2986 | 8.610 5051 | 8.613 4959 | 8.616 5559  | 8.619 6159  | 47 |
| 14 | 8.603 2219 | 8.607 3506 | 8.610 5569 | 8.613 5474 | 8.616 6074  | 8.619 6674  | 46 |
| 15 | 8.603 2742 | 8.607 4026 | 8.610 6084 | 8.613 5989 | 8.616 6589  | 8.619 7189  | 45 |
| 16 | 8.603 3265 | 8.607 4545 | 8.610 6601 | 8.613 6505 | 8.616 7105  | 8.619 7705  | 44 |
| 17 | 8.603 3788 | 8.607 5064 | 8.610 7117 | 8.613 7020 | 8.616 7620  | 8.619 8220  | 43 |
| 18 | 8.603 4311 | 8.607 5584 | 8.610 7635 | 8.613 7535 | 8.616 8135  | 8.619 8735  | 42 |
| 19 | 8.603 4835 | 8.607 6101 | 8.610 8148 | 8.613 8050 | 8.616 8650  | 8.619 9250  | 41 |
| 20 | 8.603 5357 | 8.607 6622 | 8.610 8664 | 8.613 8565 | 8.616 9165  | 8.619 9765  | 40 |
| 21 | 8.603 5880 | 8.607 7142 | 8.610 9179 | 8.613 9080 | 8.617 0680  | 8.620 0280  | 39 |
| 22 | 8.603 6403 | 8.607 7661 | 8.610 9694 | 8.613 9595 | 8.617 1195  | 8.620 0795  | 38 |
| 23 | 8.603 6926 | 8.607 8180 | 8.611 0210 | 8.614 0110 | 8.617 1710  | 8.620 1310  | 37 |
| 24 | 8.603 7449 | 8.607 8699 | 8.611 0725 | 8.614 0625 | 8.617 2225  | 8.620 1825  | 36 |
| 25 | 8.603 7972 | 8.607 9218 | 8.611 1243 | 8.614 1143 | 8.617 2743  | 8.620 2343  | 35 |
| 26 | 8.603 8494 | 8.607 9736 | 8.611 1755 | 8.614 1655 | 8.617 3255  | 8.620 2855  | 34 |
| 27 | 8.603 9017 | 8.608 0255 | 8.611 2270 | 8.614 2170 | 8.617 3770  | 8.620 3370  | 33 |
| 28 | 8.603 9539 | 8.608 0774 | 8.611 2784 | 8.614 2684 | 8.617 4284  | 8.620 3884  | 32 |
| 29 | 8.603 0062 | 8.608 1291 | 8.611 3300 | 8.614 3199 | 8.617 4799  | 8.620 4399  | 31 |
| 30 | 8.603 0584 | 8.608 1811 | 8.611 3815 | 8.614 3712 | 8.617 5312  | 8.620 4912  | 30 |
| 31 | 8.603 1106 | 8.608 2330 | 8.611 4330 | 8.614 4225 | 8.617 5825  | 8.620 5425  | 29 |
| 32 | 8.603 1629 | 8.608 2848 | 8.611 4845 | 8.614 4738 | 8.617 6338  | 8.620 5938  | 28 |
| 33 | 8.603 2151 | 8.608 3367 | 8.611 5360 | 8.614 5251 | 8.617 6851  | 8.620 6451  | 27 |
| 34 | 8.603 2673 | 8.608 3885 | 8.611 5874 | 8.614 5764 | 8.617 7364  | 8.620 6964  | 26 |
| 35 | 8.603 3195 | 8.608 4403 | 8.611 6389 | 8.614 6277 | 8.617 7877  | 8.620 7477  | 25 |
| 36 | 8.603 3717 | 8.608 4922 | 8.611 6903 | 8.614 6790 | 8.617 8390  | 8.620 7990  | 24 |
| 37 | 8.603 4239 | 8.608 5440 | 8.611 7418 | 8.614 7303 | 8.617 8903  | 8.620 8503  | 23 |
| 38 | 8.603 4761 | 8.608 5958 | 8.611 7932 | 8.614 7816 | 8.617 9416  | 8.620 9016  | 22 |
| 39 | 8.603 5282 | 8.608 6476 | 8.611 8447 | 8.614 8329 | 8.617 9929  | 8.620 9529  | 21 |
| 40 | 8.603 5804 | 8.608 6994 | 8.611 8961 | 8.614 8842 | 8.618 0442  | 8.621 0042  | 20 |
| 41 | 8.603 6326 | 8.608 7512 | 8.611 9475 | 8.614 9355 | 8.618 0955  | 8.621 0555  | 19 |
| 42 | 8.603 6847 | 8.608 8030 | 8.611 9990 | 8.614 9868 | 8.618 1468  | 8.621 1068  | 18 |
| 43 | 8.603 7369 | 8.608 8548 | 8.612 0504 | 8.615 0381 | 8.618 1981  | 8.621 1581  | 17 |
| 44 | 8.603 7891 | 8.608 9065 | 8.612 1018 | 8.615 0894 | 8.618 2494  | 8.621 2094  | 16 |
| 45 | 8.603 8412 | 8.608 9583 | 8.612 1532 | 8.615 1407 | 8.618 3007  | 8.621 2607  | 15 |
| 46 | 8.603 8933 | 8.609 0101 | 8.612 2046 | 8.615 1920 | 8.618 3520  | 8.621 3120  | 14 |
| 47 | 8.603 9455 | 8.609 0618 | 8.612 2560 | 8.615 2433 | 8.618 4033  | 8.621 3633  | 13 |
| 48 | 8.603 9976 | 8.609 1136 | 8.612 3074 | 8.615 2946 | 8.618 4546  | 8.621 4146  | 12 |
| 49 | 8.606 0497 | 8.609 1653 | 8.612 3587 | 8.615 3459 | 8.618 5059  | 8.621 4659  | 11 |
| 50 | 8.606 1018 | 8.609 2171 | 8.612 4101 | 8.615 3972 | 8.618 5572  | 8.621 5172  | 10 |
| 51 | 8.606 1539 | 8.609 2688 | 8.612 4615 | 8.615 4485 | 8.618 6085  | 8.621 5685  | 9  |
| 52 | 8.606 2060 | 8.609 3205 | 8.612 5128 | 8.615 4998 | 8.618 6598  | 8.621 6198  | 8  |
| 53 | 8.606 2581 | 8.609 3723 | 8.612 5642 | 8.615 5511 | 8.618 7111  | 8.621 6711  | 7  |
| 54 | 8.606 3102 | 8.609 4240 | 8.612 6155 | 8.615 6024 | 8.618 7624  | 8.621 7224  | 6  |
| 55 | 8.606 3623 | 8.609 4757 | 8.612 6669 | 8.615 6537 | 8.618 8137  | 8.621 7737  | 5  |
| 56 | 8.606 4143 | 8.609 5274 | 8.612 7182 | 8.615 7050 | 8.618 8650  | 8.621 8250  | 4  |
| 57 | 8.606 4664 | 8.609 5791 | 8.612 7695 | 8.615 7563 | 8.618 9163  | 8.621 8763  | 3  |
| 58 | 8.606 5185 | 8.609 6307 | 8.612 8208 | 8.615 8076 | 8.618 9676  | 8.621 9276  | 2  |
| 59 | 8.606 5705 | 8.609 6824 | 8.612 8721 | 8.615 8589 | 8.619 0189  | 8.621 9789  | 1  |
| 60 | 8.606 6226 | 8.609 7341 | 8.612 9235 | 8.615 9102 | 8.619 0702  | 8.622 0302  | 0  |
| "  | 41'        | 40'        | 39'        | 38'        | 37'         | 36'         | "  |



| "  | 18'        | 19'        | 20'        | 21'        | 22'        | 23'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.603 8386 | 8.606 9777 | 8.610 0943 | 8.613 1889 | 8.616 2616 | 8.619 3127 | 60 |
| 1  | 8.603 8911 | 8.607 0298 | 8.610 1461 | 8.613 2402 | 8.616 3126 | 8.619 3634 | 59 |
| 2  | 8.603 9436 | 8.607 0819 | 8.610 1978 | 8.613 2916 | 8.616 3636 | 8.619 4141 | 58 |
| 3  | 8.603 9961 | 8.607 1340 | 8.610 2496 | 8.613 3430 | 8.616 4146 | 8.619 4647 | 57 |
| 4  | 8.604 0485 | 8.607 1862 | 8.610 3013 | 8.613 3944 | 8.616 4656 | 8.619 5154 | 56 |
| 5  | 8.604 1010 | 8.607 2383 | 8.610 3531 | 8.613 4457 | 8.616 5166 | 8.619 5660 | 55 |
| 6  | 8.604 1535 | 8.607 2903 | 8.610 4048 | 8.613 4971 | 8.616 5676 | 8.619 6167 | 54 |
| 7  | 8.604 2060 | 8.607 3424 | 8.610 4565 | 8.613 5485 | 8.616 6186 | 8.619 6673 | 53 |
| 8  | 8.604 2584 | 8.607 3945 | 8.610 5082 | 8.613 5998 | 8.616 6696 | 8.619 7180 | 52 |
| 9  | 8.604 3109 | 8.607 4466 | 8.610 5599 | 8.613 6511 | 8.616 7206 | 8.619 7686 | 51 |
| 10 | 8.604 3633 | 8.607 4987 | 8.610 6116 | 8.613 7025 | 8.616 7716 | 8.619 8192 | 50 |
| 11 | 8.604 4158 | 8.607 5507 | 8.610 6633 | 8.613 7538 | 8.616 8225 | 8.619 8698 | 49 |
| 12 | 8.604 4682 | 8.607 6028 | 8.610 7150 | 8.613 8051 | 8.616 8735 | 8.619 9204 | 48 |
| 13 | 8.604 5206 | 8.607 6548 | 8.610 7667 | 8.613 8564 | 8.616 9245 | 8.619 9710 | 47 |
| 14 | 8.604 5731 | 8.607 7069 | 8.610 8184 | 8.613 9078 | 8.616 9754 | 8.620 0216 | 46 |
| 15 | 8.604 6255 | 8.607 7589 | 8.610 8700 | 8.613 9591 | 8.617 0264 | 8.620 0722 | 45 |
| 16 | 8.604 6779 | 8.607 8110 | 8.610 9217 | 8.614 0104 | 8.617 0773 | 8.620 1228 | 44 |
| 17 | 8.604 7303 | 8.607 8630 | 8.610 9733 | 8.614 0617 | 8.617 1282 | 8.620 1734 | 43 |
| 18 | 8.604 7827 | 8.607 9150 | 8.611 0250 | 8.614 1129 | 8.617 1792 | 8.620 2239 | 42 |
| 19 | 8.604 8351 | 8.607 9670 | 8.611 0766 | 8.614 1642 | 8.617 2301 | 8.620 2745 | 41 |
| 20 | 8.604 8875 | 8.608 0190 | 8.611 1283 | 8.614 2155 | 8.617 2810 | 8.620 3251 | 40 |
| 21 | 8.604 9398 | 8.608 0710 | 8.611 1799 | 8.614 2668 | 8.617 3319 | 8.620 3756 | 39 |
| 22 | 8.604 9922 | 8.608 1230 | 8.611 2315 | 8.614 3180 | 8.617 3828 | 8.620 4262 | 38 |
| 23 | 8.605 0446 | 8.608 1750 | 8.611 2832 | 8.614 3693 | 8.617 4337 | 8.620 4767 | 37 |
| 24 | 8.605 0969 | 8.608 2270 | 8.611 3348 | 8.614 4205 | 8.617 4846 | 8.620 5273 | 36 |
| 25 | 8.605 1493 | 8.608 2790 | 8.611 3864 | 8.614 4718 | 8.617 5355 | 8.620 5778 | 35 |
| 26 | 8.605 2016 | 8.608 3310 | 8.611 4380 | 8.614 5230 | 8.617 5864 | 8.620 6283 | 34 |
| 27 | 8.605 2540 | 8.608 3829 | 8.611 4896 | 8.614 5743 | 8.617 6372 | 8.620 6788 | 33 |
| 28 | 8.605 3063 | 8.608 4349 | 8.611 5412 | 8.614 6255 | 8.617 6881 | 8.620 7294 | 32 |
| 29 | 8.605 3586 | 8.608 4868 | 8.611 5928 | 8.614 6767 | 8.617 7390 | 8.620 7799 | 31 |
| 30 | 8.605 4110 | 8.608 5388 | 8.611 6443 | 8.614 7279 | 8.617 7898 | 8.620 8304 | 30 |
| 31 | 8.605 4633 | 8.608 5907 | 8.611 6959 | 8.614 7791 | 8.617 8407 | 8.620 8809 | 29 |
| 32 | 8.605 5156 | 8.608 6427 | 8.611 7475 | 8.614 8303 | 8.617 8915 | 8.620 9314 | 28 |
| 33 | 8.605 5679 | 8.608 6946 | 8.611 7990 | 8.614 8815 | 8.617 9424 | 8.620 9818 | 27 |
| 34 | 8.605 6202 | 8.608 7465 | 8.611 8506 | 8.614 9327 | 8.617 9932 | 8.621 0323 | 26 |
| 35 | 8.605 6725 | 8.608 7984 | 8.611 9021 | 8.614 9839 | 8.618 0440 | 8.621 0828 | 25 |
| 36 | 8.605 7247 | 8.608 8503 | 8.611 9537 | 8.615 0351 | 8.618 0948 | 8.621 1333 | 24 |
| 37 | 8.605 7770 | 8.608 9022 | 8.612 0052 | 8.615 0862 | 8.618 1456 | 8.621 1837 | 23 |
| 38 | 8.605 8293 | 8.608 9541 | 8.612 0567 | 8.615 1374 | 8.618 1965 | 8.621 2342 | 22 |
| 39 | 8.605 8816 | 8.609 0060 | 8.612 1083 | 8.615 1886 | 8.618 2473 | 8.621 2846 | 21 |
| 40 | 8.605 9338 | 8.609 0579 | 8.612 1598 | 8.615 2397 | 8.618 2981 | 8.621 3351 | 20 |
| 41 | 8.605 9861 | 8.609 1098 | 8.612 2113 | 8.615 2909 | 8.618 3488 | 8.621 3855 | 19 |
| 42 | 8.606 0383 | 8.609 1617 | 8.612 2628 | 8.615 3420 | 8.618 3996 | 8.621 4359 | 18 |
| 43 | 8.606 0906 | 8.609 2135 | 8.612 3143 | 8.615 3932 | 8.618 4504 | 8.621 4864 | 17 |
| 44 | 8.606 1428 | 8.609 2654 | 8.612 3658 | 8.615 4443 | 8.618 5012 | 8.621 5368 | 16 |
| 45 | 8.606 1950 | 8.609 3173 | 8.612 4173 | 8.615 4954 | 8.618 5519 | 8.621 5872 | 15 |
| 46 | 8.606 2472 | 8.609 3691 | 8.612 4688 | 8.615 5465 | 8.618 6027 | 8.621 6376 | 14 |
| 47 | 8.606 2995 | 8.609 4209 | 8.612 5202 | 8.615 5976 | 8.618 6535 | 8.621 6880 | 13 |
| 48 | 8.606 3517 | 8.609 4728 | 8.612 5717 | 8.615 6487 | 8.618 7042 | 8.621 7384 | 12 |
| 49 | 8.606 4039 | 8.609 5246 | 8.612 6232 | 8.615 6998 | 8.618 7550 | 8.621 7888 | 11 |
| 50 | 8.606 4561 | 8.609 5764 | 8.612 6746 | 8.615 7509 | 8.618 8057 | 8.621 8392 | 10 |
| 51 | 8.606 5083 | 8.609 6283 | 8.612 7261 | 8.615 8020 | 8.618 8564 | 8.621 8896 | 9  |
| 52 | 8.606 5604 | 8.609 6801 | 8.612 7775 | 8.615 8531 | 8.618 9072 | 8.621 9399 | 8  |
| 53 | 8.606 6126 | 8.609 7319 | 8.612 8290 | 8.615 9042 | 8.618 9579 | 8.621 9903 | 7  |
| 54 | 8.606 6648 | 8.609 7837 | 8.612 8804 | 8.615 9553 | 8.619 0086 | 8.622 0407 | 6  |
| 55 | 8.606 7169 | 8.609 8355 | 8.612 9318 | 8.616 0063 | 8.619 0593 | 8.622 0910 | 5  |
| 56 | 8.606 7691 | 8.609 8872 | 8.612 9832 | 8.616 0574 | 8.619 1100 | 8.622 1414 | 4  |
| 57 | 8.606 8213 | 8.609 9390 | 8.613 0347 | 8.616 1084 | 8.619 1607 | 8.622 1917 | 3  |
| 58 | 8.606 8734 | 8.609 9908 | 8.613 0861 | 8.616 1595 | 8.619 2114 | 8.622 2421 | 2  |
| 59 | 8.606 9255 | 8.610 0426 | 8.613 1375 | 8.616 2105 | 8.619 2621 | 8.622 2924 | 1  |
| 60 | 8.606 9777 | 8.610 0943 | 8.613 1889 | 8.616 2616 | 8.619 3127 | 8.622 3427 | 0  |
| "  | 41'        | 40'        | 39'        | 38'        | 37'        | 36'        | "  |



| "  | 24'        | 25'        | 26'        | 27'        | 28'        | 29'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.621 9616 | 8.624 9653 | 8.627 9484 | 8.630 9111 | 8.633 8537 | 8.636 7764 | 60 |
| 1  | 8.622 0118 | 8.625 0152 | 8.627 9980 | 8.630 9603 | 8.633 9025 | 8.636 8249 | 59 |
| 2  | 8.622 0621 | 8.625 0651 | 8.628 0475 | 8.631 0095 | 8.633 9514 | 8.636 8735 | 58 |
| 3  | 8.622 1123 | 8.625 1150 | 8.628 0970 | 8.631 0587 | 8.634 0003 | 8.636 9220 | 57 |
| 4  | 8.622 1625 | 8.625 1649 | 8.628 1466 | 8.631 1079 | 8.634 0491 | 8.636 9706 | 56 |
| 5  | 8.622 2127 | 8.625 2147 | 8.628 1961 | 8.631 1571 | 8.634 0980 | 8.637 0191 | 55 |
| 6  | 8.622 2629 | 8.625 2646 | 8.628 2456 | 8.631 2063 | 8.634 1468 | 8.637 0676 | 54 |
| 7  | 8.622 3131 | 8.625 3144 | 8.628 2951 | 8.631 2554 | 8.634 1957 | 8.637 1161 | 53 |
| 8  | 8.622 3633 | 8.625 3643 | 8.628 3446 | 8.631 3046 | 8.634 2445 | 8.637 1646 | 52 |
| 9  | 8.622 4135 | 8.625 4141 | 8.628 3941 | 8.631 3538 | 8.634 2933 | 8.637 2131 | 51 |
| 10 | 8.622 4637 | 8.625 4639 | 8.628 4436 | 8.631 4029 | 8.634 3422 | 8.637 2616 | 50 |
| 11 | 8.622 5138 | 8.625 5138 | 8.628 4931 | 8.631 4521 | 8.634 3910 | 8.637 3101 | 49 |
| 12 | 8.622 5640 | 8.625 5636 | 8.628 5426 | 8.631 5012 | 8.634 4398 | 8.637 3586 | 48 |
| 13 | 8.622 6142 | 8.625 6134 | 8.628 5920 | 8.631 5503 | 8.634 4886 | 8.637 4071 | 47 |
| 14 | 8.622 6643 | 8.625 6632 | 8.628 6415 | 8.631 5995 | 8.634 5374 | 8.637 4555 | 46 |
| 15 | 8.622 7145 | 8.625 7130 | 8.628 6910 | 8.631 6486 | 8.634 5862 | 8.637 5040 | 45 |
| 16 | 8.622 7646 | 8.625 7628 | 8.628 7404 | 8.631 6977 | 8.634 6350 | 8.637 5525 | 44 |
| 17 | 8.622 8148 | 8.625 8126 | 8.628 7899 | 8.631 7469 | 8.634 6838 | 8.637 6009 | 43 |
| 18 | 8.622 8649 | 8.625 8624 | 8.628 8393 | 8.631 7960 | 8.634 7326 | 8.637 6494 | 42 |
| 19 | 8.622 9150 | 8.625 9122 | 8.628 8888 | 8.631 8451 | 8.634 7813 | 8.637 6978 | 41 |
| 20 | 8.622 9652 | 8.625 9620 | 8.628 9382 | 8.631 8942 | 8.634 8301 | 8.637 7463 | 40 |
| 21 | 8.623 0153 | 8.626 0118 | 8.628 9877 | 8.631 9433 | 8.634 8789 | 8.637 7947 | 39 |
| 22 | 8.623 0654 | 8.626 0615 | 8.629 0371 | 8.631 9924 | 8.634 9276 | 8.637 8432 | 38 |
| 23 | 8.623 1155 | 8.626 1113 | 8.629 0865 | 8.632 0414 | 8.634 9764 | 8.637 8916 | 37 |
| 24 | 8.623 1656 | 8.626 1610 | 8.629 1359 | 8.632 0905 | 8.635 0251 | 8.637 9400 | 36 |
| 25 | 8.623 2157 | 8.626 2108 | 8.629 1853 | 8.632 1396 | 8.635 0739 | 8.637 9884 | 35 |
| 26 | 8.623 2658 | 8.626 2605 | 8.629 2347 | 8.632 1887 | 8.635 1226 | 8.638 0368 | 34 |
| 27 | 8.623 3159 | 8.626 3103 | 8.629 2841 | 8.632 2377 | 8.635 1713 | 8.638 0852 | 33 |
| 28 | 8.623 3659 | 8.626 3600 | 8.629 3335 | 8.632 2868 | 8.635 2201 | 8.638 1336 | 32 |
| 29 | 8.623 4160 | 8.626 4097 | 8.629 3829 | 8.632 3358 | 8.635 2688 | 8.638 1820 | 31 |
| 30 | 8.623 4661 | 8.626 4594 | 8.629 4323 | 8.632 3849 | 8.635 3175 | 8.638 2304 | 30 |
| 31 | 8.623 5161 | 8.626 5092 | 8.629 4817 | 8.632 4339 | 8.635 3662 | 8.638 2788 | 29 |
| 32 | 8.623 5662 | 8.626 5589 | 8.629 5310 | 8.632 4830 | 8.635 4149 | 8.638 3272 | 28 |
| 33 | 8.623 6162 | 8.626 6086 | 8.629 5804 | 8.632 5320 | 8.635 4636 | 8.638 3755 | 27 |
| 34 | 8.623 6663 | 8.626 6583 | 8.629 6298 | 8.632 5810 | 8.635 5123 | 8.638 4239 | 26 |
| 35 | 8.623 7163 | 8.626 7080 | 8.629 6791 | 8.632 6300 | 8.635 5610 | 8.638 4723 | 25 |
| 36 | 8.623 7663 | 8.626 7576 | 8.629 7285 | 8.632 6790 | 8.635 6097 | 8.638 5206 | 24 |
| 37 | 8.623 8164 | 8.626 8073 | 8.629 7778 | 8.632 7280 | 8.635 6583 | 8.638 5690 | 23 |
| 38 | 8.623 8664 | 8.626 8570 | 8.629 8271 | 8.632 7770 | 8.635 7070 | 8.638 6173 | 22 |
| 39 | 8.623 9164 | 8.626 9067 | 8.629 8765 | 8.632 8260 | 8.635 7557 | 8.638 6657 | 21 |
| 40 | 8.623 9664 | 8.626 9563 | 8.629 9258 | 8.632 8750 | 8.635 8043 | 8.638 7140 | 20 |
| 41 | 8.624 0164 | 8.627 0060 | 8.629 9751 | 8.632 9240 | 8.635 8530 | 8.638 7623 | 19 |
| 42 | 8.624 0664 | 8.627 0556 | 8.630 0244 | 8.632 9730 | 8.635 9016 | 8.638 8107 | 18 |
| 43 | 8.624 1164 | 8.627 1053 | 8.630 0737 | 8.633 0220 | 8.635 9503 | 8.638 8590 | 17 |
| 44 | 8.624 1664 | 8.627 1549 | 8.630 1230 | 8.633 0709 | 8.635 9989 | 8.638 9073 | 16 |
| 45 | 8.624 2164 | 8.627 2046 | 8.630 1723 | 8.633 1199 | 8.636 0476 | 8.638 9556 | 15 |
| 46 | 8.624 2663 | 8.627 2542 | 8.630 2216 | 8.633 1689 | 8.636 0962 | 8.639 0039 | 14 |
| 47 | 8.624 3163 | 8.627 3038 | 8.630 2709 | 8.633 2178 | 8.636 1448 | 8.639 0522 | 13 |
| 48 | 8.624 3663 | 8.627 3534 | 8.630 3202 | 8.633 2667 | 8.636 1934 | 8.639 1005 | 12 |
| 49 | 8.624 4162 | 8.627 4030 | 8.630 3694 | 8.633 3157 | 8.636 2420 | 8.639 1488 | 11 |
| 50 | 8.624 4662 | 8.627 4527 | 8.630 4187 | 8.633 3646 | 8.636 2906 | 8.639 1971 | 10 |
| 51 | 8.624 5161 | 8.627 5023 | 8.630 4680 | 8.633 4136 | 8.636 3392 | 8.639 2453 | 9  |
| 52 | 8.624 5660 | 8.627 5519 | 8.630 5172 | 8.633 4625 | 8.636 3878 | 8.639 2936 | 8  |
| 53 | 8.624 6160 | 8.627 6014 | 8.630 5665 | 8.633 5114 | 8.636 4364 | 8.639 3419 | 7  |
| 54 | 8.624 6659 | 8.627 6510 | 8.630 6157 | 8.633 5603 | 8.636 4850 | 8.639 3901 | 6  |
| 55 | 8.624 7158 | 8.627 7006 | 8.630 6650 | 8.633 6092 | 8.636 5336 | 8.639 4384 | 5  |
| 56 | 8.624 7657 | 8.627 7502 | 8.630 7142 | 8.633 6581 | 8.636 5822 | 8.639 4866 | 4  |
| 57 | 8.624 8156 | 8.627 7997 | 8.630 7634 | 8.633 7070 | 8.636 6307 | 8.639 5349 | 3  |
| 58 | 8.624 8655 | 8.627 8493 | 8.630 8127 | 8.633 7559 | 8.636 6793 | 8.639 5831 | 2  |
| 59 | 8.624 9154 | 8.627 8989 | 8.630 8619 | 8.633 8048 | 8.636 7279 | 8.639 6313 | 1  |
| 60 | 8.624 9653 | 8.627 9484 | 8.630 9111 | 8.633 8537 | 8.636 7764 | 8.639 6796 | 0  |
| "  | 35'        | 34'        | 33'        | 32'        | 31'        | 30'        | "  |



| "  | 24'        | 25'        | 26'        | 27'        | 28'        | 29'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.622 3427 | 8.625 3518 | 8.628 3402 | 8.631 3083 | 8.634 2563 | 8.637 1845 | 60 |
| 1  | 8.622 3930 | 8.625 4017 | 8.628 3898 | 8.631 3576 | 8.634 3052 | 8.637 2331 | 59 |
| 2  | 8.622 4434 | 8.625 4517 | 8.628 4395 | 8.631 4069 | 8.634 3542 | 8.637 2817 | 58 |
| 3  | 8.622 4937 | 8.625 5017 | 8.628 4891 | 8.631 4561 | 8.634 4031 | 8.637 3303 | 57 |
| 4  | 8.622 5440 | 8.625 5516 | 8.628 5387 | 8.631 5054 | 8.634 4521 | 8.637 3790 | 56 |
| 5  | 8.622 5943 | 8.625 6016 | 8.628 5883 | 8.631 5547 | 8.634 5010 | 8.637 4276 | 55 |
| 6  | 8.622 6446 | 8.625 6515 | 8.628 6379 | 8.631 6040 | 8.634 5500 | 8.637 4762 | 54 |
| 7  | 8.622 6948 | 8.625 7015 | 8.628 6875 | 8.631 6532 | 8.634 5989 | 8.637 5248 | 53 |
| 8  | 8.622 7451 | 8.625 7514 | 8.628 7371 | 8.631 7025 | 8.634 6478 | 8.637 5734 | 52 |
| 9  | 8.622 7954 | 8.625 8013 | 8.628 7867 | 8.631 7517 | 8.634 6967 | 8.637 6220 | 51 |
| 10 | 8.622 8457 | 8.625 8513 | 8.628 8363 | 8.631 8010 | 8.634 7457 | 8.637 6706 | 50 |
| 11 | 8.622 8959 | 8.625 9012 | 8.628 8859 | 8.631 8502 | 8.634 7946 | 8.637 7192 | 49 |
| 12 | 8.622 9462 | 8.625 9511 | 8.628 9354 | 8.631 8995 | 8.634 8435 | 8.637 7677 | 48 |
| 13 | 8.622 9964 | 8.626 0010 | 8.628 9850 | 8.631 9487 | 8.634 8924 | 8.637 8163 | 47 |
| 14 | 8.623 0467 | 8.626 0509 | 8.629 0346 | 8.631 9979 | 8.634 9413 | 8.637 8649 | 46 |
| 15 | 8.623 0969 | 8.626 1008 | 8.629 0841 | 8.632 0471 | 8.634 9902 | 8.637 9134 | 45 |
| 16 | 8.623 1472 | 8.626 1507 | 8.629 1337 | 8.632 0963 | 8.635 0390 | 8.637 9620 | 44 |
| 17 | 8.623 1974 | 8.626 2006 | 8.629 1832 | 8.632 1456 | 8.635 0879 | 8.638 0105 | 43 |
| 18 | 8.623 2476 | 8.626 2505 | 8.629 2327 | 8.632 1948 | 8.635 1368 | 8.638 0591 | 42 |
| 19 | 8.623 2978 | 8.626 3003 | 8.629 2823 | 8.632 2440 | 8.635 1857 | 8.638 1076 | 41 |
| 20 | 8.623 3480 | 8.626 3502 | 8.629 3318 | 8.632 2931 | 8.635 2345 | 8.638 1562 | 40 |
| 21 | 8.623 3983 | 8.626 4001 | 8.629 3813 | 8.632 3423 | 8.635 2834 | 8.638 2047 | 39 |
| 22 | 8.623 4485 | 8.626 4499 | 8.629 4308 | 8.632 3915 | 8.635 3322 | 8.638 2532 | 38 |
| 23 | 8.623 4986 | 8.626 4998 | 8.629 4803 | 8.632 4407 | 8.635 3811 | 8.638 3017 | 37 |
| 24 | 8.623 5488 | 8.626 5496 | 8.629 5298 | 8.632 4899 | 8.635 4299 | 8.638 3502 | 36 |
| 25 | 8.623 5990 | 8.626 5994 | 8.629 5793 | 8.632 5390 | 8.635 4787 | 8.638 3988 | 35 |
| 26 | 8.623 6492 | 8.626 6493 | 8.629 6288 | 8.632 5882 | 8.635 5276 | 8.638 4473 | 34 |
| 27 | 8.623 6994 | 8.626 6991 | 8.629 6783 | 8.632 6373 | 8.635 5764 | 8.638 4958 | 33 |
| 28 | 8.623 7495 | 8.626 7489 | 8.629 7278 | 8.632 6865 | 8.635 6252 | 8.638 5442 | 32 |
| 29 | 8.623 7997 | 8.626 7987 | 8.629 7773 | 8.632 7356 | 8.635 6740 | 8.638 5927 | 31 |
| 30 | 8.623 8498 | 8.626 8485 | 8.629 8268 | 8.632 7848 | 8.635 7228 | 8.638 6412 | 30 |
| 31 | 8.623 9000 | 8.626 8983 | 8.629 8762 | 8.632 8339 | 8.635 7716 | 8.638 6897 | 29 |
| 32 | 8.623 9501 | 8.626 9481 | 8.629 9257 | 8.632 8830 | 8.635 8204 | 8.638 7382 | 28 |
| 33 | 8.624 0003 | 8.626 9979 | 8.629 9751 | 8.632 9321 | 8.635 8692 | 8.638 7866 | 27 |
| 34 | 8.624 0504 | 8.627 0477 | 8.630 0246 | 8.632 9812 | 8.635 9180 | 8.638 8351 | 26 |
| 35 | 8.624 1005 | 8.627 0975 | 8.630 0740 | 8.633 0303 | 8.635 9668 | 8.638 8835 | 25 |
| 36 | 8.624 1506 | 8.627 1473 | 8.630 1235 | 8.633 0795 | 8.636 0155 | 8.638 9320 | 24 |
| 37 | 8.624 2008 | 8.627 1971 | 8.630 1729 | 8.633 1285 | 8.636 0643 | 8.638 9804 | 23 |
| 38 | 8.624 2509 | 8.627 2468 | 8.630 2223 | 8.633 1776 | 8.636 1131 | 8.639 0289 | 22 |
| 39 | 8.624 3010 | 8.627 2966 | 8.630 2717 | 8.633 2267 | 8.636 1618 | 8.639 0773 | 21 |
| 40 | 8.624 3511 | 8.627 3463 | 8.630 3211 | 8.633 2758 | 8.636 2106 | 8.639 1257 | 20 |
| 41 | 8.624 4011 | 8.627 3961 | 8.630 3706 | 8.633 3249 | 8.636 2593 | 8.639 1741 | 19 |
| 42 | 8.624 4512 | 8.627 4458 | 8.630 4200 | 8.633 3740 | 8.636 3081 | 8.639 2225 | 18 |
| 43 | 8.624 5013 | 8.627 4956 | 8.630 4694 | 8.633 4230 | 8.636 3568 | 8.639 2710 | 17 |
| 44 | 8.624 5514 | 8.627 5453 | 8.630 5188 | 8.633 4721 | 8.636 4055 | 8.639 3194 | 16 |
| 45 | 8.624 6015 | 8.627 5950 | 8.630 5681 | 8.633 5211 | 8.636 4542 | 8.639 3678 | 15 |
| 46 | 8.624 6515 | 8.627 6447 | 8.630 6175 | 8.633 5702 | 8.636 5030 | 8.639 4162 | 14 |
| 47 | 8.624 7016 | 8.627 6944 | 8.630 6669 | 8.633 6192 | 8.636 5517 | 8.639 4645 | 13 |
| 48 | 8.624 7516 | 8.627 7441 | 8.630 7163 | 8.633 6683 | 8.636 6004 | 8.639 5129 | 12 |
| 49 | 8.624 8017 | 8.627 7938 | 8.630 7656 | 8.633 7173 | 8.636 6491 | 8.639 5613 | 11 |
| 50 | 8.624 8517 | 8.627 8435 | 8.630 8150 | 8.633 7663 | 8.636 6978 | 8.639 6097 | 10 |
| 51 | 8.624 9017 | 8.627 8932 | 8.630 8643 | 8.633 8153 | 8.636 7465 | 8.639 6580 | 9  |
| 52 | 8.624 9518 | 8.627 9429 | 8.630 9137 | 8.633 8643 | 8.636 7952 | 8.639 7064 | 8  |
| 53 | 8.625 0018 | 8.627 9926 | 8.630 9630 | 8.633 9134 | 8.636 8438 | 8.639 7548 | 7  |
| 54 | 8.625 0518 | 8.628 0423 | 8.631 0124 | 8.633 9624 | 8.636 8925 | 8.639 8031 | 6  |
| 55 | 8.625 1018 | 8.628 0919 | 8.631 0617 | 8.634 0114 | 8.636 9412 | 8.639 8515 | 5  |
| 56 | 8.625 1518 | 8.628 1416 | 8.631 1110 | 8.634 0603 | 8.636 9899 | 8.639 8998 | 4  |
| 57 | 8.625 2018 | 8.628 1913 | 8.631 1603 | 8.634 1093 | 8.637 0385 | 8.639 9481 | 3  |
| 58 | 8.625 2518 | 8.628 2409 | 8.631 2097 | 8.634 1583 | 8.637 0872 | 8.639 9965 | 2  |
| 59 | 8.625 3018 | 8.628 2906 | 8.631 2590 | 8.634 2073 | 8.637 1358 | 8.640 0448 | 1  |
| 60 | 8.625 3518 | 8.628 3402 | 8.631 3083 | 8.634 2563 | 8.637 1845 | 8.640 0931 | 0  |
| "  | 85'        | 84'        | 83'        | 82'        | 81'        | 80'        | "  |



| "  | 30'        | 31'        | 32'        | 33'        | 34'        | 35'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.639 6796 | 8.642 5634 | 8.645 4282 | 8.648 2742 | 8.651 1016 | 8.653 9107 | 60 |
| 1  | 8.639 7278 | 8.642 6113 | 8.645 4758 | 8.648 3214 | 8.651 1485 | 8.653 9573 | 59 |
| 2  | 8.639 7760 | 8.642 6592 | 8.645 5234 | 8.648 3687 | 8.651 1955 | 8.654 0040 | 58 |
| 3  | 8.639 8242 | 8.642 7071 | 8.645 5709 | 8.648 4160 | 8.651 2425 | 8.654 0506 | 57 |
| 4  | 8.639 8724 | 8.642 7550 | 8.645 6185 | 8.648 4632 | 8.651 2894 | 8.654 0973 | 56 |
| 5  | 8.639 9206 | 8.642 8029 | 8.645 6661 | 8.648 5105 | 8.651 3364 | 8.654 1439 | 55 |
| 6  | 8.639 9688 | 8.642 8507 | 8.645 7136 | 8.648 5577 | 8.651 3833 | 8.654 1906 | 54 |
| 7  | 8.640 0170 | 8.642 8986 | 8.645 7612 | 8.648 6050 | 8.651 4302 | 8.654 2372 | 53 |
| 8  | 8.640 0652 | 8.642 9465 | 8.645 8087 | 8.648 6522 | 8.651 4772 | 8.654 2838 | 52 |
| 9  | 8.640 1134 | 8.642 9943 | 8.645 8563 | 8.648 6995 | 8.651 5241 | 8.654 3305 | 51 |
| 10 | 8.640 1615 | 8.643 0422 | 8.645 9038 | 8.648 7467 | 8.651 5710 | 8.654 3771 | 50 |
| 11 | 8.640 2097 | 8.643 0900 | 8.645 9514 | 8.648 7939 | 8.651 6179 | 8.654 4237 | 49 |
| 12 | 8.640 2579 | 8.643 1379 | 8.645 9989 | 8.648 8411 | 8.651 6649 | 8.654 4703 | 48 |
| 13 | 8.640 3060 | 8.643 1857 | 8.646 0464 | 8.648 8883 | 8.651 7118 | 8.654 5169 | 47 |
| 14 | 8.640 3542 | 8.643 2336 | 8.646 0939 | 8.648 9355 | 8.651 7587 | 8.654 5635 | 46 |
| 15 | 8.640 4023 | 8.643 2814 | 8.646 1414 | 8.648 9827 | 8.651 8056 | 8.654 6101 | 45 |
| 16 | 8.640 4505 | 8.643 3292 | 8.646 1889 | 8.649 0299 | 8.651 8524 | 8.654 6567 | 44 |
| 17 | 8.640 4986 | 8.643 3770 | 8.646 2364 | 8.649 0771 | 8.651 8993 | 8.654 7033 | 43 |
| 18 | 8.640 5467 | 8.643 4248 | 8.646 2839 | 8.649 1243 | 8.651 9462 | 8.654 7498 | 42 |
| 19 | 8.640 5949 | 8.643 4726 | 8.646 3314 | 8.649 1715 | 8.651 9931 | 8.654 7964 | 41 |
| 20 | 8.640 6430 | 8.643 5204 | 8.646 3789 | 8.649 2187 | 8.652 0400 | 8.654 8430 | 40 |
| 21 | 8.640 6911 | 8.643 5682 | 8.646 4264 | 8.649 2659 | 8.652 0868 | 8.654 8896 | 39 |
| 22 | 8.640 7392 | 8.643 6160 | 8.646 4739 | 8.649 3130 | 8.652 1337 | 8.654 9361 | 38 |
| 23 | 8.640 7873 | 8.643 6638 | 8.646 5214 | 8.649 3602 | 8.652 1805 | 8.654 9827 | 37 |
| 24 | 8.640 8354 | 8.643 7116 | 8.646 5688 | 8.649 4073 | 8.652 2274 | 8.655 0292 | 36 |
| 25 | 8.640 8835 | 8.643 7594 | 8.646 6163 | 8.649 4545 | 8.652 2742 | 8.655 0758 | 35 |
| 26 | 8.640 9316 | 8.643 8071 | 8.646 6637 | 8.649 5016 | 8.652 3211 | 8.655 1223 | 34 |
| 27 | 8.640 9797 | 8.643 8549 | 8.646 7112 | 8.649 5488 | 8.652 3679 | 8.655 1688 | 33 |
| 28 | 8.641 0277 | 8.643 9027 | 8.646 7586 | 8.649 5959 | 8.652 4147 | 8.655 2154 | 32 |
| 29 | 8.641 0758 | 8.643 9504 | 8.646 8061 | 8.649 6430 | 8.652 4616 | 8.655 2619 | 31 |
| 30 | 8.641 1239 | 8.643 9982 | 8.646 8535 | 8.649 6902 | 8.652 5084 | 8.655 3084 | 30 |
| 31 | 8.641 1719 | 8.644 0459 | 8.646 9009 | 8.649 7373 | 8.652 5552 | 8.655 3549 | 29 |
| 32 | 8.641 2200 | 8.644 0936 | 8.646 9484 | 8.649 7844 | 8.652 6020 | 8.655 4014 | 28 |
| 33 | 8.641 2680 | 8.644 1414 | 8.646 9958 | 8.649 8315 | 8.652 6488 | 8.655 4479 | 27 |
| 34 | 8.641 3161 | 8.644 1891 | 8.647 0432 | 8.649 8786 | 8.652 6956 | 8.655 4944 | 26 |
| 35 | 8.641 3641 | 8.644 2368 | 8.647 0906 | 8.649 9257 | 8.652 7424 | 8.655 5409 | 25 |
| 36 | 8.641 4122 | 8.644 2845 | 8.647 1380 | 8.649 9728 | 8.652 7892 | 8.655 5874 | 24 |
| 37 | 8.641 4602 | 8.644 3323 | 8.647 1854 | 8.650 0199 | 8.652 8360 | 8.655 6339 | 23 |
| 38 | 8.641 5082 | 8.644 3800 | 8.647 2328 | 8.650 0670 | 8.652 8828 | 8.655 6804 | 22 |
| 39 | 8.641 5562 | 8.644 4277 | 8.647 2802 | 8.650 1141 | 8.652 9295 | 8.655 7268 | 21 |
| 40 | 8.641 6043 | 8.644 4754 | 8.647 3276 | 8.650 1612 | 8.652 9763 | 8.655 7733 | 20 |
| 41 | 8.641 6523 | 8.644 5231 | 8.647 3750 | 8.650 2082 | 8.653 0231 | 8.655 8198 | 19 |
| 42 | 8.641 7003 | 8.644 5707 | 8.647 4223 | 8.650 2553 | 8.653 0698 | 8.655 8662 | 18 |
| 43 | 8.641 7483 | 8.644 6184 | 8.647 4697 | 8.650 3023 | 8.653 1166 | 8.655 9127 | 17 |
| 44 | 8.641 7963 | 8.644 6661 | 8.647 5171 | 8.650 3494 | 8.653 1633 | 8.655 9591 | 16 |
| 45 | 8.641 8442 | 8.644 7138 | 8.647 5644 | 8.650 3964 | 8.653 2101 | 8.656 0056 | 15 |
| 46 | 8.641 8922 | 8.644 7614 | 8.647 6118 | 8.650 4435 | 8.653 2568 | 8.656 0520 | 14 |
| 47 | 8.641 9402 | 8.644 8091 | 8.647 6591 | 8.650 4905 | 8.653 3036 | 8.656 0985 | 13 |
| 48 | 8.641 9882 | 8.644 8567 | 8.647 7065 | 8.650 5376 | 8.653 3503 | 8.656 1449 | 12 |
| 49 | 8.642 0361 | 8.644 9044 | 8.647 7538 | 8.650 5846 | 8.653 3970 | 8.656 1913 | 11 |
| 50 | 8.642 0841 | 8.644 9520 | 8.647 8011 | 8.650 6316 | 8.653 4437 | 8.656 2377 | 10 |
| 51 | 8.642 1321 | 8.644 9997 | 8.647 8485 | 8.650 6786 | 8.653 4905 | 8.656 2841 | 9  |
| 52 | 8.642 1800 | 8.645 0473 | 8.647 8958 | 8.650 7257 | 8.653 5372 | 8.656 3306 | 8  |
| 53 | 8.642 2279 | 8.645 0949 | 8.647 9431 | 8.650 7727 | 8.653 5839 | 8.656 3770 | 7  |
| 54 | 8.642 2759 | 8.645 1426 | 8.647 9904 | 8.650 8197 | 8.653 6306 | 8.656 4234 | 6  |
| 55 | 8.642 3238 | 8.645 1902 | 8.648 0377 | 8.650 8667 | 8.653 6773 | 8.656 4698 | 5  |
| 56 | 8.642 3717 | 8.645 2378 | 8.648 0850 | 8.650 9137 | 8.653 7240 | 8.656 5161 | 4  |
| 57 | 8.642 4197 | 8.645 2854 | 8.648 1323 | 8.650 9606 | 8.653 7706 | 8.656 5625 | 3  |
| 58 | 8.642 4676 | 8.645 3330 | 8.648 1796 | 8.651 0076 | 8.653 8173 | 8.656 6089 | 2  |
| 59 | 8.642 5155 | 8.645 3806 | 8.648 2269 | 8.651 0546 | 8.653 8640 | 8.656 6553 | 1  |
| 60 | 8.642 5634 | 8.645 4282 | 8.648 2742 | 8.651 1016 | 8.653 9107 | 8.656 7017 | 0  |
| "  | 29'        | 28'        | 27'        | 26'        | 25'        | 24'        | "  |







| "  | 36'        | 37'        | 38'        | 39'        | 40'        | 41'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.656 7017 | 8.659 4748 | 8.662 2303 | 8.664 9684 | 8.667 6893 | 8.670 3932 | 60 |
| 1  | 8.656 7480 | 8.659 5209 | 8.662 2761 | 8.665 0139 | 8.667 7345 | 8.670 4381 | 59 |
| 2  | 8.656 7944 | 8.659 5669 | 8.662 3218 | 8.665 0594 | 8.667 7797 | 8.670 4831 | 58 |
| 3  | 8.656 8407 | 8.659 6130 | 8.662 3676 | 8.665 1048 | 8.667 8249 | 8.670 5280 | 57 |
| 4  | 8.656 8871 | 8.659 6590 | 8.662 4134 | 8.665 1503 | 8.667 8701 | 8.670 5729 | 56 |
| 5  | 8.656 9334 | 8.659 7051 | 8.662 4591 | 8.665 1958 | 8.667 9153 | 8.670 6178 | 55 |
| 6  | 8.656 9798 | 8.659 7511 | 8.662 5049 | 8.665 2413 | 8.667 9604 | 8.670 6627 | 54 |
| 7  | 8.657 0261 | 8.659 7972 | 8.662 5506 | 8.665 2867 | 8.668 0056 | 8.670 7076 | 53 |
| 8  | 8.657 0724 | 8.659 8432 | 8.662 5964 | 8.665 3322 | 8.668 0508 | 8.670 7525 | 52 |
| 9  | 8.657 1188 | 8.659 8892 | 8.662 6421 | 8.665 3776 | 8.668 0960 | 8.670 7974 | 51 |
| 10 | 8.657 1651 | 8.659 9353 | 8.662 6878 | 8.665 4231 | 8.668 1411 | 8.670 8422 | 50 |
| 11 | 8.657 2114 | 8.659 9813 | 8.662 7336 | 8.665 4685 | 8.668 1863 | 8.670 8871 | 49 |
| 12 | 8.657 2577 | 8.660 0273 | 8.662 7793 | 8.665 5139 | 8.668 2314 | 8.670 9320 | 48 |
| 13 | 8.657 3040 | 8.660 0733 | 8.662 8250 | 8.665 5594 | 8.668 2766 | 8.670 9769 | 47 |
| 14 | 8.657 3503 | 8.660 1193 | 8.662 8707 | 8.665 6048 | 8.668 3217 | 8.671 0217 | 46 |
| 15 | 8.657 3966 | 8.660 1653 | 8.662 9164 | 8.665 6502 | 8.668 3669 | 8.671 0666 | 45 |
| 16 | 8.657 4429 | 8.660 2113 | 8.662 9621 | 8.665 6956 | 8.668 4120 | 8.671 1114 | 44 |
| 17 | 8.657 4892 | 8.660 2573 | 8.663 0078 | 8.665 7411 | 8.668 4571 | 8.671 1563 | 43 |
| 18 | 8.657 5355 | 8.660 3033 | 8.663 0535 | 8.665 7865 | 8.668 5022 | 8.671 2011 | 42 |
| 19 | 8.657 5817 | 8.660 3493 | 8.663 0992 | 8.665 8319 | 8.668 5474 | 8.671 2460 | 41 |
| 20 | 8.657 6280 | 8.660 3952 | 8.663 1449 | 8.665 8773 | 8.668 5925 | 8.671 2908 | 40 |
| 21 | 8.657 6743 | 8.660 4412 | 8.663 1906 | 8.665 9227 | 8.668 6376 | 8.671 3356 | 39 |
| 22 | 8.657 7205 | 8.660 4872 | 8.663 2363 | 8.665 9680 | 8.668 6827 | 8.671 3805 | 38 |
| 23 | 8.657 7668 | 8.660 5331 | 8.663 2819 | 8.666 0134 | 8.668 7278 | 8.671 4253 | 37 |
| 24 | 8.657 8130 | 8.660 5791 | 8.663 3276 | 8.666 0588 | 8.668 7729 | 8.671 4701 | 36 |
| 25 | 8.657 8593 | 8.660 6250 | 8.663 3733 | 8.666 1042 | 8.668 8180 | 8.671 5149 | 35 |
| 26 | 8.657 9055 | 8.660 6710 | 8.663 4189 | 8.666 1495 | 8.668 8631 | 8.671 5597 | 34 |
| 27 | 8.657 9518 | 8.660 7169 | 8.663 4646 | 8.666 1949 | 8.668 9082 | 8.671 6045 | 33 |
| 28 | 8.657 9980 | 8.660 7629 | 8.663 5102 | 8.666 2403 | 8.668 9532 | 8.671 6493 | 32 |
| 29 | 8.658 0442 | 8.660 8088 | 8.663 5559 | 8.666 2856 | 8.668 9983 | 8.671 6941 | 31 |
| 30 | 8.658 0904 | 8.660 8547 | 8.663 6015 | 8.666 3310 | 8.669 0434 | 8.671 7389 | 30 |
| 31 | 8.658 1367 | 8.660 9007 | 8.663 6471 | 8.666 3763 | 8.669 0884 | 8.671 7837 | 29 |
| 32 | 8.658 1829 | 8.660 9466 | 8.663 6928 | 8.666 4217 | 8.669 1335 | 8.671 8284 | 28 |
| 33 | 8.658 2291 | 8.660 9925 | 8.663 7384 | 8.666 4670 | 8.669 1785 | 8.671 8732 | 27 |
| 34 | 8.658 2753 | 8.661 0384 | 8.663 7840 | 8.666 5123 | 8.669 2236 | 8.671 9180 | 26 |
| 35 | 8.658 3215 | 8.661 0843 | 8.663 8296 | 8.666 5577 | 8.669 2686 | 8.671 9628 | 25 |
| 36 | 8.658 3677 | 8.661 1302 | 8.663 8752 | 8.666 6030 | 8.669 3137 | 8.672 0075 | 24 |

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| "  | 36'        | 37'        | 38'        | 39'        | 40'        | 41'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.657 1490 | 8.659 9279 | 8.662 6891 | 8.665 4331 | 8.668 1598 | 8.670 8697 | 60 |
| 1  | 8.657 1954 | 8.659 9740 | 8.662 7350 | 8.665 4787 | 8.668 2051 | 8.670 9147 | 59 |
| 2  | 8.657 2419 | 8.660 0202 | 8.662 7809 | 8.665 5242 | 8.668 2504 | 8.670 9597 | 58 |
| 3  | 8.657 2883 | 8.660 0663 | 8.662 8268 | 8.665 5698 | 8.668 2957 | 8.671 0047 | 57 |
| 4  | 8.657 3348 | 8.660 1125 | 8.662 8726 | 8.665 6154 | 8.668 3410 | 8.671 0497 | 56 |
| 5  | 8.657 3812 | 8.660 1586 | 8.662 9185 | 8.665 6610 | 8.668 3863 | 8.671 0947 | 55 |
| 6  | 8.657 4276 | 8.660 2048 | 8.662 9643 | 8.665 7065 | 8.668 4316 | 8.671 1397 | 54 |
| 7  | 8.657 4741 | 8.660 2509 | 8.663 0102 | 8.665 7521 | 8.668 4769 | 8.671 1847 | 53 |
| 8  | 8.657 5205 | 8.660 2970 | 8.663 0560 | 8.665 7976 | 8.668 5221 | 8.671 2297 | 52 |
| 9  | 8.657 5669 | 8.660 3432 | 8.663 1018 | 8.665 8432 | 8.668 5674 | 8.671 2747 | 51 |
| 10 | 8.657 6133 | 8.660 3893 | 8.663 1477 | 8.665 8887 | 8.668 6127 | 8.671 3197 | 50 |
| 11 | 8.657 6598 | 8.660 4354 | 8.663 1935 | 8.665 9343 | 8.668 6579 | 8.671 3647 | 49 |
| 12 | 8.657 7062 | 8.660 4815 | 8.663 2393 | 8.665 9798 | 8.668 7032 | 8.671 4096 | 48 |
| 13 | 8.657 7526 | 8.660 5276 | 8.663 2851 | 8.666 0253 | 8.668 7484 | 8.671 4546 | 47 |
| 14 | 8.657 7990 | 8.660 5737 | 8.663 3309 | 8.666 0708 | 8.668 7936 | 8.671 4996 | 46 |
| 15 | 8.657 8453 | 8.660 6198 | 8.663 3768 | 8.666 1164 | 8.668 8389 | 8.671 5445 | 45 |
| 16 | 8.657 8917 | 8.660 6659 | 8.663 4226 | 8.666 1619 | 8.668 8841 | 8.671 5895 | 44 |
| 17 | 8.657 9381 | 8.660 7120 | 8.663 4683 | 8.666 2074 | 8.668 9293 | 8.671 6344 | 43 |
| 18 | 8.657 9845 | 8.660 7581 | 8.663 5141 | 8.666 2529 | 8.668 9746 | 8.671 6793 | 42 |
| 19 | 8.658 0309 | 8.660 8042 | 8.663 5599 | 8.666 2984 | 8.669 0198 | 8.671 7243 | 41 |
| 20 | 8.658 0772 | 8.660 8502 | 8.663 6057 | 8.666 3439 | 8.669 0650 | 8.671 7692 | 40 |
| 21 | 8.658 1236 | 8.660 8963 | 8.663 6515 | 8.666 3894 | 8.669 1102 | 8.671 8142 | 39 |
| 22 | 8.658 1699 | 8.660 9424 | 8.663 6973 | 8.666 4349 | 8.669 1554 | 8.671 8591 | 38 |
| 23 | 8.658 2163 | 8.660 9884 | 8.663 7430 | 8.666 4804 | 8.669 2006 | 8.671 9040 | 37 |
| 24 | 8.658 2626 | 8.661 0345 | 8.663 7888 | 8.666 5258 | 8.669 2458 | 8.671 9489 | 36 |
| 25 | 8.658 3090 | 8.661 0805 | 8.663 8345 | 8.666 5713 | 8.669 2910 | 8.671 9938 | 35 |
| 26 | 8.658 3553 | 8.661 1266 | 8.663 8803 | 8.666 6168 | 8.669 3362 | 8.672 0387 | 34 |
| 27 | 8.658 4017 | 8.661 1726 | 8.663 9261 | 8.666 6622 | 8.669 3814 | 8.672 0836 | 33 |
| 28 | 8.658 4480 | 8.661 2186 | 8.663 9718 | 8.666 7077 | 8.669 4265 | 8.672 1285 | 32 |
| 29 | 8.658 4943 | 8.661 2647 | 8.664 0175 | 8.666 7531 | 8.669 4717 | 8.672 1734 | 31 |
| 30 | 8.658 5406 | 8.661 3107 | 8.664 0633 | 8.666 7986 | 8.669 5169 | 8.672 2183 | 30 |
| 31 | 8.658 5869 | 8.661 3567 | 8.664 1090 | 8.666 8440 | 8.669 5620 | 8.672 2632 | 29 |
| 32 | 8.658 6332 | 8.661 4027 | 8.664 1547 | 8.666 8895 | 8.669 6072 | 8.672 3081 | 28 |
| 33 | 8.658 6795 | 8.661 4487 | 8.664 2004 | 8.666 9349 | 8.669 6523 | 8.672 3529 | 27 |
| 34 | 8.658 7258 | 8.661 4947 | 8.664 2462 | 8.666 9803 | 8.669 6975 | 8.672 3978 | 26 |
| 35 | 8.658 7721 | 8.661 5407 | 8.664 2919 | 8.667 0258 | 8.669 7426 | 8.672 4427 | 25 |
| 36 | 8.658 8184 | 8.661 5867 | 8.664 3376 | 8.667 0712 | 8.669 7878 | 8.672 4875 | 24 |
| 37 | 8.658 8647 | 8.661 6327 | 8.664 3833 | 8.667 1166 | 8.669 8329 | 8.672 5324 | 23 |
| 38 | 8.658 9110 | 8.661 6787 | 8.664 4290 | 8.667 1620 | 8.669 8780 | 8.672 5772 | 22 |
| 39 | 8.658 9573 | 8.661 7247 | 8.664 4747 | 8.667 2074 | 8.669 9231 | 8.672 6221 | 21 |
| 40 | 8.659 0035 | 8.661 7707 | 8.664 5203 | 8.667 2528 | 8.669 9683 | 8.672 6669 | 20 |
| 41 | 8.659 0498 | 8.661 8166 | 8.664 5660 | 8.667 2982 | 8.670 0134 | 8.672 7118 | 19 |
| 42 | 8.659 0960 | 8.661 8626 | 8.664 6117 | 8.667 3436 | 8.670 0585 | 8.672 7566 | 18 |
| 43 | 8.659 1423 | 8.661 9086 | 8.664 6574 | 8.667 3890 | 8.670 1036 | 8.672 8014 | 17 |
| 44 | 8.659 1885 | 8.661 9545 | 8.664 7030 | 8.667 4344 | 8.670 1487 | 8.672 8462 | 16 |
| 45 | 8.659 2348 | 8.662 0005 | 8.664 7487 | 8.667 4797 | 8.670 1938 | 8.672 8911 | 15 |
| 46 | 8.659 2810 | 8.662 0464 | 8.664 7944 | 8.667 5251 | 8.670 2389 | 8.672 9359 | 14 |
| 47 | 8.659 3273 | 8.662 0924 | 8.664 8400 | 8.667 5705 | 8.670 2840 | 8.672 9807 | 13 |
| 48 | 8.659 3735 | 8.662 1383 | 8.664 8857 | 8.667 6159 | 8.670 3291 | 8.673 0255 | 12 |
| 49 | 8.659 4197 | 8.662 1842 | 8.664 9313 | 8.667 6612 | 8.670 3741 | 8.673 0703 | 11 |
| 50 | 8.659 4659 | 8.662 2301 | 8.664 9770 | 8.667 7066 | 8.670 4192 | 8.673 1151 | 10 |
| 51 | 8.659 5121 | 8.662 2761 | 8.665 0226 | 8.667 7519 | 8.670 4643 | 8.673 1599 | 9  |
| 52 | 8.659 5584 | 8.662 3220 | 8.665 0682 | 8.667 7973 | 8.670 5093 | 8.673 2047 | 8  |
| 53 | 8.659 6046 | 8.662 3679 | 8.665 1138 | 8.667 8426 | 8.670 5544 | 8.673 2494 | 7  |
| 54 | 8.659 6508 | 8.662 4138 | 8.665 1595 | 8.667 8879 | 8.670 5994 | 8.673 2942 | 6  |
| 55 | 8.659 6970 | 8.662 4597 | 8.665 2051 | 8.667 9333 | 8.670 6445 | 8.673 3390 | 5  |
| 56 | 8.659 7431 | 8.662 5056 | 8.665 2507 | 8.667 9786 | 8.670 6895 | 8.673 3837 | 4  |
| 57 | 8.659 7893 | 8.662 5515 | 8.665 2963 | 8.668 0239 | 8.670 7346 | 8.673 4285 | 3  |
| 58 | 8.659 8355 | 8.662 5974 | 8.665 3419 | 8.668 0692 | 8.670 7796 | 8.673 4733 | 2  |
| 59 | 8.659 8817 | 8.662 6433 | 8.665 3875 | 8.668 1145 | 8.670 8246 | 8.673 5180 | 1  |
| 60 | 8.659 9279 | 8.662 6891 | 8.665 4331 | 8.668 1598 | 8.670 8697 | 8.673 5628 | 0  |
| "  | 28'        | 22'        | 21'        | 20'        | 19'        | 18'        | "  |

cotg 87°

18



| "  | 42'        | 43'        | 44'        | 45'        | 46'        | 47'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.673 0804 | 8.675 7510 | 8.678 4052 | 8.681 0433 | 8.683 6654 | 8.686 2718 | 60 |
| 1  | 8.673 1250 | 8.675 7954 | 8.678 4493 | 8.681 0871 | 8.683 7090 | 8.686 3151 | 59 |
| 2  | 8.673 1697 | 8.675 8397 | 8.678 4934 | 8.681 1310 | 8.683 7526 | 8.686 3584 | 58 |
| 3  | 8.673 2143 | 8.675 8841 | 8.678 5375 | 8.681 1748 | 8.683 7961 | 8.686 4017 | 57 |
| 4  | 8.673 2589 | 8.675 9284 | 8.678 5816 | 8.681 2186 | 8.683 8397 | 8.686 4450 | 56 |
| 5  | 8.673 3036 | 8.675 9728 | 8.678 6257 | 8.681 2624 | 8.683 8832 | 8.686 4883 | 55 |
| 6  | 8.673 3482 | 8.676 0171 | 8.678 6698 | 8.681 3062 | 8.683 9268 | 8.686 5315 | 54 |
| 7  | 8.673 3928 | 8.676 0615 | 8.678 7138 | 8.681 3500 | 8.683 9703 | 8.686 5748 | 53 |
| 8  | 8.673 4374 | 8.676 1058 | 8.678 7579 | 8.681 3938 | 8.684 0138 | 8.686 6181 | 52 |
| 9  | 8.673 4820 | 8.676 1502 | 8.678 8020 | 8.681 4376 | 8.684 0574 | 8.686 6614 | 51 |
| 10 | 8.673 5266 | 8.676 1945 | 8.678 8460 | 8.681 4814 | 8.684 1009 | 8.686 7046 | 50 |
| 11 | 8.673 5712 | 8.676 2388 | 8.678 8901 | 8.681 5252 | 8.684 1444 | 8.686 7479 | 49 |
| 12 | 8.673 6158 | 8.676 2831 | 8.678 9341 | 8.681 5690 | 8.684 1879 | 8.686 7912 | 48 |
| 13 | 8.673 6604 | 8.676 3274 | 8.678 9782 | 8.681 6128 | 8.684 2315 | 8.686 8344 | 47 |
| 14 | 8.673 7050 | 8.676 3718 | 8.679 0222 | 8.681 6566 | 8.684 2750 | 8.686 8777 | 46 |
| 15 | 8.673 7496 | 8.676 4161 | 8.679 0663 | 8.681 7003 | 8.684 3185 | 8.686 9209 | 45 |
| 16 | 8.673 7942 | 8.676 4604 | 8.679 1103 | 8.681 7441 | 8.684 3620 | 8.686 9641 | 44 |
| 17 | 8.673 8387 | 8.676 5047 | 8.679 1543 | 8.681 7878 | 8.684 4055 | 8.687 0074 | 43 |
| 18 | 8.673 8833 | 8.676 5490 | 8.679 1983 | 8.681 8316 | 8.684 4490 | 8.687 0506 | 42 |
| 19 | 8.673 9279 | 8.676 5933 | 8.679 2424 | 8.681 8754 | 8.684 4925 | 8.687 0938 | 41 |
| 20 | 8.673 9724 | 8.676 6375 | 8.679 2864 | 8.681 9191 | 8.684 5359 | 8.687 1371 | 40 |
| 21 | 8.674 0170 | 8.676 6818 | 8.679 3304 | 8.681 9629 | 8.684 5794 | 8.687 1803 | 39 |
| 22 | 8.674 0615 | 8.676 7261 | 8.679 3744 | 8.682 0066 | 8.684 6229 | 8.687 2235 | 38 |
| 23 | 8.674 1061 | 8.676 7704 | 8.679 4184 | 8.682 0503 | 8.684 6664 | 8.687 2667 | 37 |
| 24 | 8.674 1506 | 8.676 8146 | 8.679 4624 | 8.682 0941 | 8.684 7098 | 8.687 3099 | 36 |
| 25 | 8.674 1951 | 8.676 8589 | 8.679 5064 | 8.682 1378 | 8.684 7533 | 8.687 3531 | 35 |
| 26 | 8.674 2397 | 8.676 9031 | 8.679 5504 | 8.682 1815 | 8.684 7968 | 8.687 3963 | 34 |
| 27 | 8.674 2842 | 8.676 9474 | 8.679 5943 | 8.682 2252 | 8.684 8402 | 8.687 4395 | 33 |
| 28 | 8.674 3287 | 8.676 9917 | 8.679 6383 | 8.682 2689 | 8.684 8837 | 8.687 4827 | 32 |
| 29 | 8.674 3732 | 8.677 0359 | 8.679 6823 | 8.682 3126 | 8.684 9271 | 8.687 5259 | 31 |
| 30 | 8.674 4177 | 8.677 0801 | 8.679 7263 | 8.682 3563 | 8.684 9706 | 8.687 5691 | 30 |
| 31 | 8.674 4622 | 8.677 1244 | 8.679 7702 | 8.682 4000 | 8.685 0140 | 8.687 6123 | 29 |
| 32 | 8.674 5068 | 8.677 1686 | 8.679 8142 | 8.682 4437 | 8.685 0574 | 8.687 6554 | 28 |
| 33 | 8.674 5512 | 8.677 2128 | 8.679 8582 | 8.682 4874 | 8.685 1008 | 8.687 6986 | 27 |
| 34 | 8.674 5957 | 8.677 2570 | 8.679 9021 | 8.682 5311 | 8.685 1443 | 8.687 7418 | 26 |
| 35 | 8.674 6402 | 8.677 3013 | 8.679 9461 | 8.682 5748 | 8.685 1877 | 8.687 7849 | 25 |
| 36 | 8.674 6847 | 8.677 3455 | 8.679 9900 | 8.682 6185 | 8.685 2311 | 8.687 8281 | 24 |
| 37 | 8.674 7292 | 8.677 3897 | 8.680 0339 | 8.682 6621 | 8.685 2745 | 8.687 8712 | 23 |
| 38 | 8.674 7737 | 8.677 4339 | 8.680 0779 | 8.682 7058 | 8.685 3179 | 8.687 9144 | 22 |
| 39 | 8.674 8181 | 8.677 4781 | 8.680 1218 | 8.682 7495 | 8.685 3613 | 8.687 9575 | 21 |
| 40 | 8.674 8626 | 8.677 5223 | 8.680 1657 | 8.682 7931 | 8.685 4047 | 8.688 0007 | 20 |
| 41 | 8.674 9071 | 8.677 5665 | 8.680 2096 | 8.682 8368 | 8.685 4481 | 8.688 0438 | 19 |
| 42 | 8.674 9515 | 8.677 6107 | 8.680 2536 | 8.682 8804 | 8.685 4915 | 8.688 0869 | 18 |
| 43 | 8.674 9960 | 8.677 6548 | 8.680 2975 | 8.682 9241 | 8.685 5349 | 8.688 1300 | 17 |
| 44 | 8.675 0404 | 8.677 6990 | 8.680 3414 | 8.682 9677 | 8.685 5783 | 8.688 1732 | 16 |
| 45 | 8.675 0849 | 8.677 7432 | 8.680 3853 | 8.683 0114 | 8.685 6216 | 8.688 2163 | 15 |
| 46 | 8.675 1293 | 8.677 7874 | 8.680 4292 | 8.683 0550 | 8.685 6650 | 8.688 2594 | 14 |
| 47 | 8.675 1737 | 8.677 8315 | 8.680 4731 | 8.683 0986 | 8.685 7084 | 8.688 3025 | 13 |
| 48 | 8.675 2182 | 8.677 8757 | 8.680 5170 | 8.683 1423 | 8.685 7517 | 8.688 3456 | 12 |
| 49 | 8.675 2626 | 8.677 9198 | 8.680 5609 | 8.683 1859 | 8.685 7951 | 8.688 3887 | 11 |
| 50 | 8.675 3070 | 8.677 9640 | 8.680 6047 | 8.683 2295 | 8.685 8385 | 8.688 4318 | 10 |
| 51 | 8.675 3514 | 8.678 0081 | 8.680 6486 | 8.683 2731 | 8.685 8818 | 8.688 4749 | 9  |
| 52 | 8.675 3959 | 8.678 0523 | 8.680 6925 | 8.683 3167 | 8.685 9252 | 8.688 5180 | 8  |
| 53 | 8.675 4403 | 8.678 0964 | 8.680 7364 | 8.683 3603 | 8.685 9685 | 8.688 5611 | 7  |
| 54 | 8.675 4847 | 8.678 1405 | 8.680 7802 | 8.683 4039 | 8.686 0118 | 8.688 6041 | 6  |
| 55 | 8.675 5291 | 8.678 1847 | 8.680 8241 | 8.683 4475 | 8.686 0552 | 8.688 6472 | 5  |
|    | 8.675 5735 | 8.678 2288 | 8.680 8679 | 8.683 4911 | 8.686 0985 | 8.688 6903 | 4  |
|    | 8.675 6178 | 8.678 2729 | 8.680 9118 | 8.683 5347 | 8.686 1418 | 8.688 7334 | 3  |
|    | 75 6622    | 8.678 3170 | 8.680 9556 | 8.683 5783 | 8.686 1851 | 8.688 7764 | 2  |
| 57 | 75 7066    | 8.678 3611 | 8.680 9995 | 8.683 6218 | 8.686 2285 | 8.688 8195 | 1  |
| 60 | 8.675 7510 | 8.678 4052 | 8.681 0433 | 8.683 6654 | 8.686 2718 | 8.688 8625 | 0  |
| "  | 17'        | 16'        | 15'        | 14'        | 13'        | 12'        | "  |



| "  | 42'        | 43'        | 44'        | 45'        | 46'        | 47'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.673 5628 | 8.676 2393 | 8.678 8996 | 8.681 5437 | 8.684 1719 | 8.686 7844 | 60 |
| 1  | 8.673 6075 | 8.676 2838 | 8.678 9438 | 8.681 5877 | 8.684 2156 | 8.686 8278 | 59 |
| 2  | 8.673 6523 | 8.676 3283 | 8.678 9880 | 8.681 6316 | 8.684 2593 | 8.686 8712 | 58 |
| 3  | 8.673 6970 | 8.676 3727 | 8.679 0322 | 8.681 6755 | 8.684 3029 | 8.686 9146 | 57 |
| 4  | 8.673 7417 | 8.676 4172 | 8.679 0764 | 8.681 7194 | 8.684 3466 | 8.686 9580 | 56 |
| 5  | 8.673 7864 | 8.676 4617 | 8.679 1206 | 8.681 7634 | 8.684 3902 | 8.687 0014 | 55 |
| 6  | 8.673 8312 | 8.676 5061 | 8.679 1647 | 8.681 8073 | 8.684 4339 | 8.687 0448 | 54 |
| 7  | 8.673 8759 | 8.676 5505 | 8.679 2089 | 8.681 8512 | 8.684 4775 | 8.687 0882 | 53 |
| 8  | 8.673 9206 | 8.676 5950 | 8.679 2531 | 8.681 8951 | 8.684 5212 | 8.687 1316 | 52 |
| 9  | 8.673 9653 | 8.676 6394 | 8.679 2972 | 8.681 9390 | 8.684 5648 | 8.687 1749 | 51 |
| 10 | 8.674 0100 | 8.676 6839 | 8.679 3414 | 8.681 9829 | 8.684 6084 | 8.687 2183 | 50 |
| 11 | 8.674 0547 | 8.676 7283 | 8.679 3856 | 8.682 0268 | 8.684 6521 | 8.687 2617 | 49 |
| 12 | 8.674 0994 | 8.676 7727 | 8.679 4297 | 8.682 0706 | 8.684 6957 | 8.687 3050 | 48 |
| 13 | 8.674 1441 | 8.676 8171 | 8.679 4739 | 8.682 1145 | 8.684 7393 | 8.687 3484 | 47 |
| 14 | 8.674 1888 | 8.676 8615 | 8.679 5180 | 8.682 1584 | 8.684 7829 | 8.687 3917 | 46 |
| 15 | 8.674 2335 | 8.676 9059 | 8.679 5621 | 8.682 2023 | 8.684 8265 | 8.687 4351 | 45 |
| 16 | 8.674 2781 | 8.676 9503 | 8.679 6063 | 8.682 2461 | 8.684 8701 | 8.687 4784 | 44 |
| 17 | 8.674 3228 | 8.676 9947 | 8.679 6504 | 8.682 2900 | 8.684 9137 | 8.687 5218 | 43 |
| 18 | 8.674 3675 | 8.677 0391 | 8.679 6945 | 8.682 3339 | 8.684 9573 | 8.687 5651 | 42 |
| 19 | 8.674 4121 | 8.677 0835 | 8.679 7386 | 8.682 3777 | 8.685 0009 | 8.687 6084 | 41 |
| 20 | 8.674 4568 | 8.677 1279 | 8.679 7828 | 8.682 4216 | 8.685 0445 | 8.687 6518 | 40 |
| 21 | 8.674 5014 | 8.677 1723 | 8.679 8269 | 8.682 4654 | 8.685 0881 | 8.687 6951 | 39 |
| 22 | 8.674 5461 | 8.677 2167 | 8.679 8710 | 8.682 5092 | 8.685 1317 | 8.687 7384 | 38 |
| 23 | 8.674 5907 | 8.677 2610 | 8.679 9151 | 8.682 5531 | 8.685 1752 | 8.687 7817 | 37 |
| 24 | 8.674 6354 | 8.677 3054 | 8.679 9592 | 8.682 5969 | 8.685 2188 | 8.687 8250 | 36 |
| 25 | 8.674 6800 | 8.677 3498 | 8.680 0033 | 8.682 6407 | 8.685 2624 | 8.687 8683 | 35 |
| 26 | 8.674 7246 | 8.677 3941 | 8.680 0474 | 8.682 6846 | 8.685 3059 | 8.687 9116 | 34 |
| 27 | 8.674 7693 | 8.677 4385 | 8.680 0914 | 8.682 7284 | 8.685 3495 | 8.687 9549 | 33 |
| 28 | 8.674 8139 | 8.677 4828 | 8.680 1355 | 8.682 7722 | 8.685 3930 | 8.687 9982 | 32 |
| 29 | 8.674 8585 | 8.677 5272 | 8.680 1796 | 8.682 8160 | 8.685 4366 | 8.688 0415 | 31 |
| 30 | 8.674 9031 | 8.677 5715 | 8.680 2237 | 8.682 8598 | 8.685 4801 | 8.688 0848 | 30 |
| 31 | 8.674 9477 | 8.677 6158 | 8.680 2677 | 8.682 9036 | 8.685 5237 | 8.688 1281 | 29 |
| 32 | 8.674 9923 | 8.677 6602 | 8.680 3118 | 8.682 9474 | 8.685 5672 | 8.688 1713 | 28 |
| 33 | 8.675 0369 | 8.677 7045 | 8.680 3559 | 8.682 9912 | 8.685 6107 | 8.688 2146 | 27 |
| 34 | 8.675 0815 | 8.677 7488 | 8.680 3999 | 8.683 0350 | 8.685 6543 | 8.688 2579 | 26 |
| 35 | 8.675 1261 | 8.677 7931 | 8.680 4440 | 8.683 0788 | 8.685 6978 | 8.688 3011 | 25 |
| 36 | 8.675 1707 | 8.677 8374 | 8.680 4880 | 8.683 1226 | 8.685 7413 | 8.688 3444 | 24 |
| 37 | 8.675 2153 | 8.677 8818 | 8.680 5320 | 8.683 1663 | 8.685 7848 | 8.688 3877 | 23 |
| 38 | 8.675 2598 | 8.677 9261 | 8.680 5761 | 8.683 2101 | 8.685 8283 | 8.688 4309 | 22 |
| 39 | 8.675 3044 | 8.677 9704 | 8.680 6201 | 8.683 2539 | 8.685 8718 | 8.688 4742 | 21 |
| 40 | 8.675 3490 | 8.678 0147 | 8.680 6641 | 8.683 2976 | 8.685 9153 | 8.688 5174 | 20 |
| 41 | 8.675 3935 | 8.678 0589 | 8.680 7082 | 8.683 3414 | 8.685 9588 | 8.688 5606 | 19 |
| 42 | 8.675 4381 | 8.678 1032 | 8.680 7522 | 8.683 3851 | 8.686 0023 | 8.688 6039 | 18 |
| 43 | 8.675 4826 | 8.678 1475 | 8.680 7962 | 8.683 4289 | 8.686 0458 | 8.688 6471 | 17 |
| 44 | 8.675 5272 | 8.678 1918 | 8.680 8402 | 8.683 4726 | 8.686 0893 | 8.688 6903 | 16 |
| 45 | 8.675 5717 | 8.678 2361 | 8.680 8842 | 8.683 5164 | 8.686 1327 | 8.688 7335 | 15 |
| 46 | 8.675 6163 | 8.678 2803 | 8.680 9282 | 8.683 5601 | 8.686 1762 | 8.688 7768 | 14 |
| 47 | 8.675 6608 | 8.678 3246 | 8.680 9722 | 8.683 6038 | 8.686 2197 | 8.688 8200 | 13 |
| 48 | 8.675 7053 | 8.678 3688 | 8.681 0162 | 8.683 6476 | 8.686 2632 | 8.688 8632 | 12 |
| 49 | 8.675 7499 | 8.678 4131 | 8.681 0602 | 8.683 6913 | 8.686 3066 | 8.688 9064 | 11 |
| 50 | 8.675 7944 | 8.678 4573 | 8.681 1042 | 8.683 7350 | 8.686 3501 | 8.688 9496 | 10 |
| 51 | 8.675 8389 | 8.678 5016 | 8.681 1481 | 8.683 7787 | 8.686 3935 | 8.688 9928 | 9  |
| 52 | 8.675 8834 | 8.678 5458 | 8.681 1921 | 8.683 8224 | 8.686 4370 | 8.689 0360 | 8  |
| 53 | 8.675 9279 | 8.678 5901 | 8.681 2361 | 8.683 8661 | 8.686 4804 | 8.689 0791 | 7  |
| 54 | 8.675 9724 | 8.678 6343 | 8.681 2800 | 8.683 9098 | 8.686 5239 | 8.689 1223 | 6  |
| 55 | 8.676 0169 | 8.678 6785 | 8.681 3240 | 8.683 9535 | 8.686 5673 | 8.689 1655 | 5  |
| 56 | 8.676 0614 | 8.678 7228 | 8.681 3680 | 8.683 9972 | 8.686 6107 | 8.689 2087 | 4  |
| 57 | 8.676 1059 | 8.678 7670 | 8.681 4119 | 8.684 0409 | 8.686 6541 | 8.689 2518 | 3  |
| 58 | 8.676 1504 | 8.678 8112 | 8.681 4559 | 8.684 0846 | 8.686 6976 | 8.689 2950 | 2  |
| 59 | 8.676 1949 | 8.678 8554 | 8.681 4998 | 8.684 1283 | 8.686 7410 | 8.689 3382 | 1  |
| 60 | 8.676 2393 | 8.678 8996 | 8.681 5437 | 8.684 1719 | 8.686 7844 | 8.689 3813 | 0  |
| "  | 17'        | 16'        | 15'        | 14'        | 13'        | 12'        | "  |



| "  | 48'        | 49'        | 50'        | 51'        | 52'        | 53'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.688 8625 | 8.691 4379 | 8.693 9980 | 8.696 5431 | 8.699 0734 | 8.701 5889 | 60 |
| 1  | 8.688 9056 | 8.691 4807 | 8.694 0406 | 8.696 5854 | 8.699 1154 | 8.701 6307 | 59 |
| 2  | 8.688 9486 | 8.691 5235 | 8.694 0831 | 8.696 6277 | 8.699 1574 | 8.701 6725 | 58 |
| 3  | 8.688 9917 | 8.691 5662 | 8.694 1256 | 8.696 6700 | 8.699 1995 | 8.701 7143 | 57 |
| 4  | 8.689 0347 | 8.691 6090 | 8.694 1682 | 8.696 7123 | 8.699 2415 | 8.701 7561 | 56 |
| 5  | 8.689 0777 | 8.691 6518 | 8.694 2107 | 8.696 7545 | 8.699 2835 | 8.701 7979 | 55 |
| 6  | 8.689 1207 | 8.691 6946 | 8.694 2532 | 8.696 7968 | 8.699 3256 | 8.701 8397 | 54 |
| 7  | 8.689 1638 | 8.691 7373 | 8.694 2957 | 8.696 8391 | 8.699 3676 | 8.701 8814 | 53 |
| 8  | 8.689 2068 | 8.691 7801 | 8.694 3382 | 8.696 8813 | 8.699 4096 | 8.701 9232 | 52 |
| 9  | 8.689 2498 | 8.691 8229 | 8.694 3807 | 8.696 9236 | 8.699 4516 | 8.701 9650 | 51 |
| 10 | 8.689 2928 | 8.691 8656 | 8.694 4232 | 8.696 9659 | 8.699 4936 | 8.702 0067 | 50 |
| 11 | 8.689 3358 | 8.691 9084 | 8.694 4657 | 8.697 0081 | 8.699 5356 | 8.702 0485 | 49 |
| 12 | 8.689 3788 | 8.691 9511 | 8.694 5082 | 8.697 0504 | 8.699 5776 | 8.702 0903 | 48 |
| 13 | 8.689 4218 | 8.691 9939 | 8.694 5507 | 8.697 0926 | 8.699 6196 | 8.702 1320 | 47 |
| 14 | 8.689 4648 | 8.692 0366 | 8.694 5932 | 8.697 1348 | 8.699 6616 | 8.702 1738 | 46 |
| 15 | 8.689 5078 | 8.692 0793 | 8.694 6357 | 8.697 1771 | 8.699 7036 | 8.702 2155 | 45 |
| 16 | 8.689 5508 | 8.692 1221 | 8.694 6782 | 8.697 2193 | 8.699 7456 | 8.702 2573 | 44 |
| 17 | 8.689 5938 | 8.692 1648 | 8.694 7207 | 8.697 2615 | 8.699 7876 | 8.702 2990 | 43 |
| 18 | 8.689 6367 | 8.692 2075 | 8.694 7631 | 8.697 3037 | 8.699 8296 | 8.702 3407 | 42 |
| 19 | 8.689 6797 | 8.692 2502 | 8.694 8056 | 8.697 3460 | 8.699 8715 | 8.702 3825 | 41 |
| 20 | 8.689 7227 | 8.692 2929 | 8.694 8480 | 8.697 3882 | 8.699 9135 | 8.702 4242 | 40 |
| 21 | 8.689 7656 | 8.692 3357 | 8.694 8905 | 8.697 4304 | 8.699 9555 | 8.702 4659 | 39 |
| 22 | 8.689 8086 | 8.692 3784 | 8.694 9330 | 8.697 4726 | 8.699 9974 | 8.702 5076 | 38 |
| 23 | 8.689 8516 | 8.692 4211 | 8.694 9754 | 8.697 5148 | 8.700 0394 | 8.702 5493 | 37 |
| 24 | 8.689 8945 | 8.692 4638 | 8.695 0179 | 8.697 5570 | 8.700 0813 | 8.702 5910 | 36 |
| 25 | 8.689 9374 | 8.692 5064 | 8.695 0603 | 8.697 5992 | 8.700 1233 | 8.702 6327 | 35 |
| 26 | 8.689 9804 | 8.692 5491 | 8.695 1027 | 8.697 6414 | 8.700 1652 | 8.702 6744 | 34 |
| 27 | 8.690 0233 | 8.692 5918 | 8.695 1452 | 8.697 6836 | 8.700 2072 | 8.702 7161 | 33 |
| 28 | 8.690 0663 | 8.692 6345 | 8.695 1876 | 8.697 7257 | 8.700 2491 | 8.702 7578 | 32 |
| 29 | 8.690 1092 | 8.692 6772 | 8.695 2300 | 8.697 7679 | 8.700 2910 | 8.702 7995 | 31 |
| 30 | 8.690 1521 | 8.692 7198 | 8.695 2724 | 8.697 8101 | 8.700 3330 | 8.702 8412 | 30 |
| 31 | 8.690 1950 | 8.692 7625 | 8.695 3149 | 8.697 8523 | 8.700 3749 | 8.702 8829 | 29 |
| 32 | 8.690 2380 | 8.692 8052 | 8.695 3573 | 8.697 8944 | 8.700 4168 | 8.702 9246 | 28 |
| 33 | 8.690 2809 | 8.692 8478 | 8.695 3997 | 8.697 9366 | 8.700 4587 | 8.702 9662 | 27 |
| 34 | 8.690 3238 | 8.692 8905 | 8.695 4421 | 8.697 9787 | 8.700 5006 | 8.703 0079 | 26 |
| 35 | 8.690 3667 | 8.692 9331 | 8.695 4845 | 8.698 0209 | 8.700 5425 | 8.703 0496 | 25 |
| 36 | 8.690 4096 | 8.692 9758 | 8.695 5269 | 8.698 0630 | 8.700 5844 | 8.703 0912 | 24 |
| 37 | 8.690 4525 | 8.693 0184 | 8.695 5693 | 8.698 1052 | 8.700 6263 | 8.703 1329 | 23 |
| 38 | 8.690 4954 | 8.693 0611 | 8.695 6117 | 8.698 1473 | 8.700 6682 | 8.703 1746 | 22 |
| 39 | 8.690 5382 | 8.693 1037 | 8.695 6540 | 8.698 1895 | 8.700 7101 | 8.703 2162 | 21 |
| 40 | 8.690 5811 | 8.693 1463 | 8.695 6964 | 8.698 2316 | 8.700 7520 | 8.703 2578 | 20 |
| 41 | 8.690 6240 | 8.693 1889 | 8.695 7388 | 8.698 2737 | 8.700 7939 | 8.703 2995 | 19 |
| 42 | 8.690 6669 | 8.693 2316 | 8.695 7812 | 8.698 3158 | 8.700 8358 | 8.703 3411 | 18 |
| 43 | 8.690 7097 | 8.693 2742 | 8.695 8235 | 8.698 3580 | 8.700 8776 | 8.703 3828 | 17 |
| 44 | 8.690 7526 | 8.693 3168 | 8.695 8659 | 8.698 4001 | 8.700 9195 | 8.703 4244 | 16 |
| 45 | 8.690 7955 | 8.693 3594 | 8.695 9082 | 8.698 4422 | 8.700 9614 | 8.703 4660 | 15 |
| 46 | 8.690 8383 | 8.693 4020 | 8.695 9506 | 8.698 4843 | 8.701 0032 | 8.703 5076 | 14 |
| 47 | 8.690 8812 | 8.693 4446 | 8.695 9929 | 8.698 5264 | 8.701 0451 | 8.703 5493 | 13 |
| 48 | 8.690 9240 | 8.693 4872 | 8.696 0353 | 8.698 5685 | 8.701 0870 | 8.703 5909 | 12 |
| 49 | 8.690 9669 | 8.693 5298 | 8.696 0776 | 8.698 6106 | 8.701 1288 | 8.703 6325 | 11 |
| 50 | 8.691 0097 | 8.693 5724 | 8.696 1200 | 8.698 6527 | 8.701 1707 | 8.703 6741 | 10 |
| 51 | 8.691 0526 | 8.693 6150 | 8.696 1623 | 8.698 6948 | 8.701 2125 | 8.703 7157 | 9  |
| 52 | 8.691 0954 | 8.693 6575 | 8.696 2046 | 8.698 7368 | 8.701 2543 | 8.703 7573 | 8  |
| 53 | 8.691 1382 | 8.693 7001 | 8.696 2470 | 8.698 7789 | 8.701 2962 | 8.703 7989 | 7  |
| 54 | 8.691 1810 | 8.693 7427 | 8.696 2893 | 8.698 8210 | 8.701 3380 | 8.703 8405 | 6  |
| 55 | 8.691 2239 | 8.693 7853 | 8.696 3316 | 8.698 8631 | 8.701 3798 | 8.703 8821 | 5  |
| 56 | 8.691 2667 | 8.693 8278 | 8.696 3739 | 8.698 9051 | 8.701 4216 | 8.703 9236 | 4  |
| 57 | 8.691 3095 | 8.693 8704 | 8.696 4162 | 8.698 9472 | 8.701 4635 | 8.703 9652 | 3  |
| 58 | 8.691 3523 | 8.693 9129 | 8.696 4585 | 8.698 9893 | 8.701 5053 | 8.704 0068 | 2  |
| 59 | 8.691 3951 | 8.693 9555 | 8.696 5008 | 8.699 0313 | 8.701 5471 | 8.704 0484 | 1  |
| 60 | 8.691 4379 | 8.693 9980 | 8.696 5431 | 8.699 0734 | 8.701 5889 | 8.704 0899 |    |
| "  | 11'        | 10'        | 9'         | 8'         | 7'         | 6'         |    |



| "  | 48'        | 49'        | 50'        | 51'        | 52'        | 53'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.689 3813 | 8.691 9629 | 8.694 5292 | 8.697 0866 | 8.699 6172 | 8.702 1390 | 60 |
| 1  | 8.689 4245 | 8.692 0058 | 8.694 5719 | 8.697 1230 | 8.699 6593 | 8.702 1810 | 59 |
| 2  | 8.689 4676 | 8.692 0487 | 8.694 6145 | 8.697 1654 | 8.699 7015 | 8.702 2229 | 58 |
| 3  | 8.689 5108 | 8.692 0916 | 8.694 6572 | 8.697 2078 | 8.699 7436 | 8.702 2648 | 57 |
| 4  | 8.689 5539 | 8.692 1344 | 8.694 6998 | 8.697 2502 | 8.699 7857 | 8.702 3067 | 56 |
| 5  | 8.689 5970 | 8.692 1773 | 8.694 7424 | 8.697 2926 | 8.699 8279 | 8.702 3486 | 55 |
| 6  | 8.689 6402 | 8.692 2202 | 8.694 7851 | 8.697 3349 | 8.699 8700 | 8.702 3904 | 54 |
| 7  | 8.689 6833 | 8.692 2631 | 8.694 8277 | 8.697 3773 | 8.699 9121 | 8.702 4323 | 53 |
| 8  | 8.689 7264 | 8.692 3059 | 8.694 8703 | 8.697 4197 | 8.699 9543 | 8.702 4742 | 52 |
| 9  | 8.689 7695 | 8.692 3488 | 8.694 9129 | 8.697 4620 | 8.699 9964 | 8.702 5161 | 51 |
| 10 | 8.689 8126 | 8.692 3917 | 8.694 9555 | 8.697 5044 | 8.700 0385 | 8.702 5580 | 50 |
| 11 | 8.689 8557 | 8.692 4345 | 8.694 9981 | 8.697 5468 | 8.700 0806 | 8.702 5998 | 49 |
| 12 | 8.689 8989 | 8.692 4774 | 8.695 0407 | 8.697 5891 | 8.700 1227 | 8.702 6417 | 48 |
| 13 | 8.689 9420 | 8.692 5202 | 8.695 0833 | 8.697 6315 | 8.700 1648 | 8.702 6835 | 47 |
| 14 | 8.689 9850 | 8.692 5630 | 8.695 1259 | 8.697 6738 | 8.700 2069 | 8.702 7254 | 46 |
| 15 | 8.690 0281 | 8.692 6059 | 8.695 1685 | 8.697 7161 | 8.700 2490 | 8.702 7673 | 45 |
| 16 | 8.690 0712 | 8.692 6487 | 8.695 2111 | 8.697 7585 | 8.700 2911 | 8.702 8091 | 44 |
| 17 | 8.690 1143 | 8.692 6915 | 8.695 2537 | 8.697 8008 | 8.700 3332 | 8.702 8509 | 43 |
| 18 | 8.690 1574 | 8.692 7344 | 8.695 2962 | 8.697 8431 | 8.700 3753 | 8.702 8928 | 42 |
| 19 | 8.690 2005 | 8.692 7772 | 8.695 3388 | 8.697 8855 | 8.700 4173 | 8.702 9346 | 41 |
| 20 | 8.690 2435 | 8.692 8200 | 8.695 3814 | 8.697 9278 | 8.700 4594 | 8.702 9765 | 40 |
| 21 | 8.690 2866 | 8.692 8628 | 8.695 4239 | 8.697 9701 | 8.700 5015 | 8.703 0183 | 39 |
| 22 | 8.690 3297 | 8.692 9056 | 8.695 4665 | 8.698 0124 | 8.700 5435 | 8.703 0601 | 38 |
| 23 | 8.690 3727 | 8.692 9484 | 8.695 5090 | 8.698 0547 | 8.700 5856 | 8.703 1019 | 37 |
| 24 | 8.690 4158 | 8.692 9912 | 8.695 5516 | 8.698 0970 | 8.700 6277 | 8.703 1437 | 36 |
| 25 | 8.690 4588 | 8.693 0340 | 8.695 5941 | 8.698 1393 | 8.700 6697 | 8.703 1856 | 35 |
| 26 | 8.690 5019 | 8.693 0768 | 8.695 6367 | 8.698 1816 | 8.700 7118 | 8.703 2274 | 34 |
| 27 | 8.690 5449 | 8.693 1196 | 8.695 6792 | 8.698 2239 | 8.700 7538 | 8.703 2692 | 33 |
| 28 | 8.690 5879 | 8.693 1624 | 8.695 7217 | 8.698 2662 | 8.700 7959 | 8.703 3110 | 32 |
| 29 | 8.690 6310 | 8.693 2052 | 8.695 7643 | 8.698 3085 | 8.700 8379 | 8.703 3528 | 31 |
| 30 | 8.690 6740 | 8.693 2479 | 8.695 8068 | 8.698 3507 | 8.700 8799 | 8.703 3946 | 30 |
| 31 | 8.690 7170 | 8.693 2907 | 8.695 8493 | 8.698 3930 | 8.700 9220 | 8.703 4363 | 29 |
| 32 | 8.690 7600 | 8.693 3335 | 8.695 8918 | 8.698 4353 | 8.700 9640 | 8.703 4781 | 28 |
| 33 | 8.690 8031 | 8.693 3764 | 8.695 9343 | 8.698 4775 | 8.701 0060 | 8.703 5199 | 27 |
| 34 | 8.690 8461 | 8.693 4190 | 8.695 9769 | 8.698 5198 | 8.701 0480 | 8.703 5617 | 26 |
| 35 | 8.690 8891 | 8.693 4618 | 8.696 0194 | 8.698 5621 | 8.701 0900 | 8.703 6035 | 25 |
| 36 | 8.690 9321 | 8.693 5045 | 8.696 0619 | 8.698 6043 | 8.701 1320 | 8.703 6452 | 24 |
| 37 | 8.690 9751 | 8.693 5473 | 8.696 1043 | 8.698 6466 | 8.701 1740 | 8.703 6870 | 23 |
| 38 | 8.691 0181 | 8.693 5900 | 8.696 1468 | 8.698 6888 | 8.701 2160 | 8.703 7287 | 22 |
| 39 | 8.691 0611 | 8.693 6327 | 8.696 1893 | 8.698 7310 | 8.701 2580 | 8.703 7705 | 21 |
| 40 | 8.691 1041 | 8.693 6755 | 8.696 2318 | 8.698 7733 | 8.701 3000 | 8.703 8122 | 20 |
| 41 | 8.691 1470 | 8.693 7182 | 8.696 2743 | 8.698 8155 | 8.701 3420 | 8.703 8540 | 19 |
| 42 | 8.691 1900 | 8.693 7609 | 8.696 3168 | 8.698 8577 | 8.701 3840 | 8.703 8957 | 18 |
| 43 | 8.691 2330 | 8.693 8036 | 8.696 3592 | 8.698 9000 | 8.701 4260 | 8.703 9375 | 17 |
| 44 | 8.691 2760 | 8.693 8464 | 8.696 4017 | 8.698 9422 | 8.701 4680 | 8.703 9792 | 16 |
| 45 | 8.691 3189 | 8.693 8891 | 8.696 4442 | 8.698 9844 | 8.701 5099 | 8.704 0209 | 15 |
| 46 | 8.691 3619 | 8.693 9318 | 8.696 4866 | 8.699 0266 | 8.701 5519 | 8.704 0627 | 14 |
| 47 | 8.691 4048 | 8.693 9745 | 8.696 5291 | 8.699 0688 | 8.701 5939 | 8.704 1044 | 13 |
| 48 | 8.691 4478 | 8.694 0172 | 8.696 5715 | 8.699 1110 | 8.701 6358 | 8.704 1461 | 12 |
| 49 | 8.691 4907 | 8.694 0599 | 8.696 6140 | 8.699 1532 | 8.701 6778 | 8.704 1878 | 11 |
| 50 | 8.691 5337 | 8.694 1026 | 8.696 6564 | 8.699 1954 | 8.701 7197 | 8.704 2295 | 10 |
| 51 | 8.691 5766 | 8.694 1453 | 8.696 6989 | 8.699 2376 | 8.701 7617 | 8.704 2713 | 9  |
| 52 | 8.691 6195 | 8.694 1879 | 8.696 7413 | 8.699 2798 | 8.701 8036 | 8.704 3130 | 8  |
| 53 | 8.691 6625 | 8.694 2306 | 8.696 7837 | 8.699 3220 | 8.701 8456 | 8.704 3547 | 7  |
| 54 | 8.691 7054 | 8.694 2733 | 8.696 8261 | 8.699 3642 | 8.701 8875 | 8.704 3964 | 6  |
| 55 | 8.691 7483 | 8.694 3160 | 8.696 8686 | 8.699 4063 | 8.701 9294 | 8.704 4381 | 5  |
| 56 | 8.691 7912 | 8.694 3586 | 8.696 9110 | 8.699 4485 | 8.701 9714 | 8.704 4797 | 4  |
| 57 | 8.691 8341 | 8.694 4013 | 8.696 9534 | 8.699 4907 | 8.702 0133 | 8.704 5214 | 3  |
| 58 | 8.691 8771 | 8.694 4439 | 8.696 9958 | 8.699 5328 | 8.702 0552 | 8.704 5631 | 2  |
| 59 | 8.691 9200 | 8.694 4866 | 8.697 0382 | 8.699 5750 | 8.702 0971 | 8.704 6048 | 1  |
| 60 | 8.691 9629 | 8.694 5292 | 8.697 0806 | 8.699 6172 | 8.702 1390 | 8.704 6465 | 0  |
| "  | 11'        | 10'        | 9'         | 8'         | 7'         | 6'         | "  |



| "  | 54'        | 55'        | 56'        | 57'        | 58'        | 59'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.704 0899 | 8.706 5766 | 8.709 0490 | 8.711 5075 | 8.713 9520 | 8.716 3829 | 60 |
| 1  | 8.704 1315 | 8.706 6179 | 8.709 0901 | 8.711 5483 | 8.713 9927 | 8.716 4233 | 59 |
| 2  | 8.704 1730 | 8.706 6592 | 8.709 1312 | 8.711 5892 | 8.714 0333 | 8.716 4637 | 58 |
| 3  | 8.704 2146 | 8.706 7005 | 8.709 1723 | 8.711 6300 | 8.714 0739 | 8.716 5041 | 57 |
| 4  | 8.704 2561 | 8.706 7419 | 8.709 2134 | 8.711 6709 | 8.714 1145 | 8.716 5445 | 56 |
| 5  | 8.704 2977 | 8.706 7832 | 8.709 2545 | 8.711 7117 | 8.714 1551 | 8.716 5848 | 55 |
| 6  | 8.704 3392 | 8.706 8245 | 8.709 2955 | 8.711 7526 | 8.714 1957 | 8.716 6252 | 54 |
| 7  | 8.704 3808 | 8.706 8658 | 8.709 3366 | 8.711 7934 | 8.714 2363 | 8.716 6656 | 53 |
| 8  | 8.704 4223 | 8.706 9071 | 8.709 3776 | 8.711 8342 | 8.714 2769 | 8.716 7060 | 52 |
| 9  | 8.704 4638 | 8.706 9484 | 8.709 4187 | 8.711 8751 | 8.714 3175 | 8.716 7463 | 51 |
| 10 | 8.704 5054 | 8.706 9896 | 8.709 4598 | 8.711 9159 | 8.714 3581 | 8.716 7867 | 50 |
| 11 | 8.704 5469 | 8.707 0309 | 8.709 5008 | 8.711 9567 | 8.714 3987 | 8.716 8271 | 49 |
| 12 | 8.704 5884 | 8.707 0722 | 8.709 5419 | 8.711 9975 | 8.714 4393 | 8.716 8674 | 48 |
| 13 | 8.704 6299 | 8.707 1135 | 8.709 5829 | 8.712 0383 | 8.714 4799 | 8.716 9078 | 47 |
| 14 | 8.704 6714 | 8.707 1548 | 8.709 6239 | 8.712 0791 | 8.714 5205 | 8.716 9481 | 46 |
| 15 | 8.704 7129 | 8.707 1960 | 8.709 6650 | 8.712 1199 | 8.714 5610 | 8.716 9885 | 45 |
| 16 | 8.704 7544 | 8.707 2373 | 8.709 7060 | 8.712 1607 | 8.714 6016 | 8.717 0288 | 44 |
| 17 | 8.704 7959 | 8.707 2785 | 8.709 7470 | 8.712 2015 | 8.714 6422 | 8.717 0692 | 43 |
| 18 | 8.704 8374 | 8.707 3198 | 8.709 7880 | 8.712 2423 | 8.714 6827 | 8.717 1095 | 42 |
| 19 | 8.704 8789 | 8.707 3611 | 8.709 8291 | 8.712 2831 | 8.714 7233 | 8.717 1498 | 41 |
| 20 | 8.704 9204 | 8.707 4023 | 8.709 8701 | 8.712 3239 | 8.714 7638 | 8.717 1901 | 40 |
| 21 | 8.704 9619 | 8.707 4436 | 8.709 9111 | 8.712 3647 | 8.714 8044 | 8.717 2305 | 39 |
| 22 | 8.705 0034 | 8.707 4848 | 8.709 9521 | 8.712 4054 | 8.714 8449 | 8.717 2708 | 38 |
| 23 | 8.705 0448 | 8.707 5260 | 8.709 9931 | 8.712 4462 | 8.714 8855 | 8.717 3111 | 37 |
| 24 | 8.705 0863 | 8.707 5673 | 8.710 0341 | 8.712 4870 | 8.714 9260 | 8.717 3514 | 36 |
| 25 | 8.705 1278 | 8.707 6085 | 8.710 0751 | 8.712 5277 | 8.714 9666 | 8.717 3917 | 35 |
| 26 | 8.705 1692 | 8.707 6497 | 8.710 1161 | 8.712 5685 | 8.715 0071 | 8.717 4320 | 34 |
| 27 | 8.705 2107 | 8.707 6909 | 8.710 1571 | 8.712 6092 | 8.715 0476 | 8.717 4723 | 33 |
| 28 | 8.705 2521 | 8.707 7322 | 8.710 1981 | 8.712 6500 | 8.715 0881 | 8.717 5126 | 32 |
| 29 | 8.705 2936 | 8.707 7734 | 8.710 2390 | 8.712 6907 | 8.715 1287 | 8.717 5529 | 31 |
| 30 | 8.705 3350 | 8.707 8146 | 8.710 2800 | 8.712 7315 | 8.715 1692 | 8.717 5932 | 30 |
| 31 | 8.705 3765 | 8.707 8558 | 8.710 3210 | 8.712 7722 | 8.715 2097 | 8.717 6335 | 29 |
| 32 | 8.705 4179 | 8.707 8970 | 8.710 3620 | 8.712 8130 | 8.715 2502 | 8.717 6738 | 28 |
| 33 | 8.705 4593 | 8.707 9382 | 8.710 4029 | 8.712 8537 | 8.715 2907 | 8.717 7141 | 27 |
| 34 | 8.705 5008 | 8.707 9794 | 8.710 4439 | 8.712 8944 | 8.715 3312 | 8.717 7543 | 26 |
| 35 | 8.705 5422 | 8.708 0206 | 8.710 4848 | 8.712 9352 | 8.715 3717 | 8.717 7946 | 25 |
| 36 | 8.705 5836 | 8.708 0618 | 8.710 5258 | 8.712 9759 | 8.715 4122 | 8.717 8349 | 24 |
| 37 | 8.705 6250 | 8.708 1029 | 8.710 5667 | 8.713 0166 | 8.715 4527 | 8.717 8751 | 23 |
| 38 | 8.705 6665 | 8.708 1441 | 8.710 6077 | 8.713 0573 | 8.715 4932 | 8.717 9154 | 22 |
| 39 | 8.705 7079 | 8.708 1853 | 8.710 6486 | 8.713 0980 | 8.715 5336 | 8.717 9557 | 21 |
| 40 | 8.705 7493 | 8.708 2265 | 8.710 6896 | 8.713 1387 | 8.715 5741 | 8.717 9959 | 20 |
| 41 | 8.705 7907 | 8.708 2676 | 8.710 7305 | 8.713 1794 | 8.715 6146 | 8.718 0362 | 19 |
| 42 | 8.705 8321 | 8.708 3088 | 8.710 7714 | 8.713 2201 | 8.715 6551 | 8.718 0764 | 18 |
| 43 | 8.705 8735 | 8.708 3499 | 8.710 8123 | 8.713 2608 | 8.715 6955 | 8.718 1166 | 17 |
| 44 | 8.705 9149 | 8.708 3911 | 8.710 8533 | 8.713 3015 | 8.715 7360 | 8.718 1569 | 16 |
| 45 | 8.705 9563 | 8.708 4323 | 8.710 8942 | 8.713 3422 | 8.715 7765 | 8.718 1971 | 15 |
| 46 | 8.705 9976 | 8.708 4734 | 8.710 9351 | 8.713 3829 | 8.715 8169 | 8.718 2373 | 14 |
| 47 | 8.706 0390 | 8.708 5145 | 8.710 9760 | 8.713 4236 | 8.715 8574 | 8.718 2776 | 13 |
| 48 | 8.706 0804 | 8.708 5557 | 8.711 0169 | 8.713 4642 | 8.715 8978 | 8.718 3178 | 12 |
| 49 | 8.706 1218 | 8.708 5968 | 8.711 0578 | 8.713 5049 | 8.715 9383 | 8.718 3580 | 11 |
| 50 | 8.706 1631 | 8.708 6380 | 8.711 0987 | 8.713 5456 | 8.715 9787 | 8.718 3982 | 10 |
| 51 | 8.706 2045 | 8.708 6791 | 8.711 1396 | 8.713 5862 | 8.716 0191 | 8.718 4384 | 9  |
| 52 | 8.706 2458 | 8.708 7202 | 8.711 1805 | 8.713 6269 | 8.716 0596 | 8.718 4786 | 8  |
| 53 | 8.706 2872 | 8.708 7613 | 8.711 2214 | 8.713 6676 | 8.716 1000 | 8.718 5188 | 7  |
| 54 | 8.706 3286 | 8.708 8024 | 8.711 2623 | 8.713 7082 | 8.716 1404 | 8.718 5590 | 6  |
| 55 | 8.706 3699 | 8.708 8435 | 8.711 3031 | 8.713 7489 | 8.716 1808 | 8.718 5992 | 5  |
| 56 | 8.706 4112 | 8.708 8847 | 8.711 3440 | 8.713 7895 | 8.716 2213 | 8.718 6394 | 4  |
| 57 | 8.706 4526 | 8.708 9258 | 8.711 3849 | 8.713 8301 | 8.716 2617 | 8.718 6796 | 3  |
| 58 | 8.706 4939 | 8.708 9669 | 8.711 4258 | 8.713 8708 | 8.716 3021 | 8.718 7198 | 2  |
| 59 | 8.706 5353 | 8.709 0080 | 8.711 4666 | 8.713 9114 | 8.716 3425 | 8.718 7600 | 1  |
| 60 | 8.706 5766 | 8.709 0490 | 8.711 5075 | 8.713 9520 | 8.716 3829 | 8.718 8002 | 0  |
| "  | 5'         | 4'         | 3'         | 2'         | 1'         | 0'         | "  |

cos 87°



| "  | 54'        | 55'        | 56'        | 57'        | 58'        | 59'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.704 6465 | 8.707 1395 | 8.709 6185 | 8.712 0834 | 8.714 5345 | 8.716 9719 | 60 |
| 1  | 8.704 6881 | 8.707 1810 | 8.709 6597 | 8.712 1243 | 8.714 5752 | 8.717 0124 | 59 |
| 2  | 8.704 7298 | 8.707 2224 | 8.709 7008 | 8.712 1653 | 8.714 6159 | 8.717 0529 | 58 |
| 3  | 8.704 7714 | 8.707 2638 | 8.709 7420 | 8.712 2063 | 8.714 6567 | 8.717 0934 | 57 |
| 4  | 8.704 8131 | 8.707 3052 | 8.709 7832 | 8.712 2472 | 8.714 6974 | 8.717 1339 | 56 |
| 5  | 8.704 8548 | 8.707 3466 | 8.709 8244 | 8.712 2882 | 8.714 7381 | 8.717 1744 | 55 |
| 6  | 8.704 8964 | 8.707 3881 | 8.709 8656 | 8.712 3291 | 8.714 7788 | 8.717 2149 | 54 |
| 7  | 8.704 9380 | 8.707 4295 | 8.709 9067 | 8.712 3701 | 8.714 8195 | 8.717 2554 | 53 |
| 8  | 8.704 9797 | 8.707 4709 | 8.709 9479 | 8.712 4110 | 8.714 8602 | 8.717 2958 | 52 |
| 9  | 8.705 0213 | 8.707 5123 | 8.709 9891 | 8.712 4519 | 8.714 9010 | 8.717 3363 | 51 |
| 10 | 8.705 0630 | 8.707 5537 | 8.710 0302 | 8.712 4929 | 8.714 9417 | 8.717 3768 | 50 |
| 11 | 8.705 1046 | 8.707 5951 | 8.710 0714 | 8.712 5338 | 8.714 9824 | 8.717 4173 | 49 |
| 12 | 8.705 1462 | 8.707 6364 | 8.710 1126 | 8.712 5747 | 8.715 0230 | 8.717 4577 | 48 |
| 13 | 8.705 1878 | 8.707 6778 | 8.710 1537 | 8.712 6156 | 8.715 0637 | 8.717 4982 | 47 |
| 14 | 8.705 2294 | 8.707 7192 | 8.710 1949 | 8.712 6565 | 8.715 1044 | 8.717 5387 | 46 |
| 15 | 8.705 2711 | 8.707 7606 | 8.710 2360 | 8.712 6974 | 8.715 1451 | 8.717 5791 | 45 |
| 16 | 8.705 3127 | 8.707 8020 | 8.710 2771 | 8.712 7384 | 8.715 1858 | 8.717 6196 | 44 |
| 17 | 8.705 3543 | 8.707 8433 | 8.710 3183 | 8.712 7793 | 8.715 2265 | 8.717 6600 | 43 |
| 18 | 8.705 3959 | 8.707 8847 | 8.710 3594 | 8.712 8202 | 8.715 2671 | 8.717 7005 | 42 |
| 19 | 8.705 4375 | 8.707 9260 | 8.710 4005 | 8.712 8611 | 8.715 3078 | 8.717 7409 | 41 |
| 20 | 8.705 4791 | 8.707 9674 | 8.710 4416 | 8.712 9019 | 8.715 3485 | 8.717 7813 | 40 |
| 21 | 8.705 5206 | 8.708 0088 | 8.710 4828 | 8.712 9428 | 8.715 3891 | 8.717 8218 | 39 |
| 22 | 8.705 5622 | 8.708 0501 | 8.710 5239 | 8.712 9837 | 8.715 4298 | 8.717 8622 | 38 |
| 23 | 8.705 6038 | 8.708 0914 | 8.710 5650 | 8.713 0246 | 8.715 4704 | 8.717 9026 | 37 |
| 24 | 8.705 6454 | 8.708 1328 | 8.710 6061 | 8.713 0655 | 8.715 5111 | 8.717 9430 | 36 |
| 25 | 8.705 6870 | 8.708 1741 | 8.710 6472 | 8.713 1063 | 8.715 5517 | 8.717 9835 | 35 |
| 26 | 8.705 7285 | 8.708 2155 | 8.710 6883 | 8.713 1472 | 8.715 5924 | 8.718 0239 | 34 |
| 27 | 8.705 7701 | 8.708 2568 | 8.710 7294 | 8.713 1881 | 8.715 6330 | 8.718 0643 | 33 |
| 28 | 8.705 8117 | 8.708 2981 | 8.710 7705 | 8.713 2289 | 8.715 6736 | 8.718 1047 | 32 |
| 29 | 8.705 8532 | 8.708 3394 | 8.710 8116 | 8.713 2698 | 8.715 7143 | 8.718 1451 | 31 |
| 30 | 8.705 8948 | 8.708 3808 | 8.710 8527 | 8.713 3106 | 8.715 7549 | 8.718 1855 | 30 |
| 31 | 8.705 9363 | 8.708 4221 | 8.710 8937 | 8.713 3515 | 8.715 7955 | 8.718 2259 | 29 |
| 32 | 8.705 9779 | 8.708 4634 | 8.710 9348 | 8.713 3923 | 8.715 8361 | 8.718 2663 | 28 |
| 33 | 8.706 0194 | 8.708 5047 | 8.710 9759 | 8.713 4332 | 8.715 8767 | 8.718 3067 | 27 |
| 34 | 8.706 0609 | 8.708 5460 | 8.711 0170 | 8.713 4740 | 8.715 9173 | 8.718 3471 | 26 |
| 35 | 8.706 1025 | 8.708 5873 | 8.711 0580 | 8.713 5149 | 8.715 9579 | 8.718 3874 | 25 |
| 36 | 8.706 1440 | 8.708 6286 | 8.711 0991 | 8.713 5557 | 8.715 9985 | 8.718 4278 | 24 |
| 37 | 8.706 1855 | 8.708 6699 | 8.711 1401 | 8.713 5965 | 8.716 0391 | 8.718 4682 | 23 |
| 38 | 8.706 2271 | 8.708 7111 | 8.711 1812 | 8.713 6373 | 8.716 0797 | 8.718 5086 | 22 |
| 39 | 8.706 2686 | 8.708 7524 | 8.711 2222 | 8.713 6782 | 8.716 1203 | 8.718 5489 | 21 |
| 40 | 8.706 3101 | 8.708 7937 | 8.711 2633 | 8.713 7190 | 8.716 1609 | 8.718 5893 | 20 |
| 41 | 8.706 3516 | 8.708 8350 | 8.711 3043 | 8.713 7598 | 8.716 2015 | 8.718 6297 | 19 |
| 42 | 8.706 3931 | 8.708 8763 | 8.711 3454 | 8.713 8006 | 8.716 2421 | 8.718 6700 | 18 |
| 43 | 8.706 4346 | 8.708 9175 | 8.711 3864 | 8.713 8414 | 8.716 2827 | 8.718 7104 | 17 |
| 44 | 8.706 4761 | 8.708 9588 | 8.711 4274 | 8.713 8822 | 8.716 3232 | 8.718 7507 | 16 |
| 45 | 8.706 5176 | 8.709 0000 | 8.711 4685 | 8.713 9230 | 8.716 3638 | 8.718 7910 | 15 |
| 46 | 8.706 5591 | 8.709 0413 | 8.711 5095 | 8.713 9638 | 8.716 4044 | 8.718 8314 | 14 |
| 47 | 8.706 6006 | 8.709 0825 | 8.711 5505 | 8.714 0046 | 8.716 4449 | 8.718 8717 | 13 |
| 48 | 8.706 6421 | 8.709 1238 | 8.711 5915 | 8.714 0454 | 8.716 4855 | 8.718 9121 | 12 |
| 49 | 8.706 6835 | 8.709 1650 | 8.711 6325 | 8.714 0861 | 8.716 5260 | 8.718 9524 | 11 |
| 50 | 8.706 7250 | 8.709 2063 | 8.711 6735 | 8.714 1269 | 8.716 5666 | 8.718 9927 | 10 |
| 51 | 8.706 7665 | 8.709 2475 | 8.711 7145 | 8.714 1677 | 8.716 6071 | 8.719 0330 | 9  |
| 52 | 8.706 8079 | 8.709 2887 | 8.711 7555 | 8.714 2085 | 8.716 6477 | 8.719 0734 | 8  |
| 53 | 8.706 8494 | 8.709 3300 | 8.711 7965 | 8.714 2492 | 8.716 6882 | 8.719 1137 | 7  |
| 54 | 8.706 8909 | 8.709 3712 | 8.711 8375 | 8.714 2900 | 8.716 7288 | 8.719 1540 | 6  |
| 55 | 8.706 9323 | 8.709 4124 | 8.711 8785 | 8.714 3307 | 8.716 7693 | 8.719 1943 | 5  |
| 56 | 8.706 9738 | 8.709 4536 | 8.711 9195 | 8.714 3715 | 8.716 8098 | 8.719 2346 | 4  |
| 57 | 8.707 0152 | 8.709 4948 | 8.711 9605 | 8.714 4122 | 8.716 8503 | 8.719 2749 | 3  |
| 58 | 8.707 0567 | 8.709 5361 | 8.712 0014 | 8.714 4530 | 8.716 8909 | 8.719 3152 | 2  |
| 59 | 8.707 0981 | 8.709 5773 | 8.712 0424 | 8.714 4937 | 8.716 9314 | 8.719 3555 | 1  |
| 60 | 8.707 1395 | 8.709 6185 | 8.712 0834 | 8.714 5345 | 8.716 9719 | 8.719 3958 | 0  |
| "  | 5'         | 4'         | 3'         | 2'         | 1'         | 0'         | "  |



| "  | 0'         | 1'         | 2'         | 3'         | 4'         | 5'         | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.718 8002 | 8.721 2040 | 8.723 5946 | 8.725 9721 | 8.728 3366 | 8.730 6882 | 60 |
| 1  | 8.718 8403 | 8.721 2440 | 8.723 6343 | 8.726 0116 | 8.728 3759 | 8.730 7273 | 59 |
| 2  | 8.718 8805 | 8.721 2839 | 8.723 6741 | 8.726 0511 | 8.728 4152 | 8.730 7664 | 58 |
| 3  | 8.718 9207 | 8.721 3239 | 8.723 7138 | 8.726 0906 | 8.728 4544 | 8.730 8055 | 57 |
| 4  | 8.718 9608 | 8.721 3638 | 8.723 7535 | 8.726 1301 | 8.728 4937 | 8.730 8445 | 56 |
| 5  | 8.719 0010 | 8.721 4037 | 8.723 7932 | 8.726 1696 | 8.728 5330 | 8.730 8836 | 55 |
| 6  | 8.719 0412 | 8.721 4437 | 8.723 8329 | 8.726 2091 | 8.728 5723 | 8.730 9227 | 54 |
| 7  | 8.719 0813 | 8.721 4836 | 8.723 8727 | 8.726 2486 | 8.728 6116 | 8.730 9617 | 53 |
| 8  | 8.719 1215 | 8.721 5235 | 8.723 9124 | 8.726 2881 | 8.728 6509 | 8.731 0008 | 52 |
| 9  | 8.719 1616 | 8.721 5635 | 8.723 9521 | 8.726 3276 | 8.728 6901 | 8.731 0399 | 51 |
| 10 | 8.719 2017 | 8.721 6034 | 8.723 9918 | 8.726 3671 | 8.728 7294 | 8.731 0789 | 50 |
| 11 | 8.719 2419 | 8.721 6433 | 8.724 0315 | 8.726 4065 | 8.728 7687 | 8.731 1180 | 49 |
| 12 | 8.719 2820 | 8.721 6832 | 8.724 0711 | 8.726 4460 | 8.728 8079 | 8.731 1570 | 48 |
| 13 | 8.719 3221 | 8.721 7231 | 8.724 1108 | 8.726 4855 | 8.728 8472 | 8.731 1961 | 47 |
| 14 | 8.719 3623 | 8.721 7630 | 8.724 1505 | 8.726 5249 | 8.728 8864 | 8.731 2351 | 46 |
| 15 | 8.719 4024 | 8.721 8029 | 8.724 1902 | 8.726 5644 | 8.728 9257 | 8.731 2741 | 45 |
| 16 | 8.719 4425 | 8.721 8428 | 8.724 2299 | 8.726 6039 | 8.728 9649 | 8.731 3132 | 44 |
| 17 | 8.719 4826 | 8.721 8827 | 8.724 2696 | 8.726 6433 | 8.729 0042 | 8.731 3522 | 43 |
| 18 | 8.719 5227 | 8.721 9226 | 8.724 3092 | 8.726 6828 | 8.729 0434 | 8.731 3912 | 42 |
| 19 | 8.719 5628 | 8.721 9625 | 8.724 3489 | 8.726 7222 | 8.729 0826 | 8.731 4302 | 41 |
| 20 | 8.719 6029 | 8.722 0024 | 8.724 3886 | 8.726 7617 | 8.729 1219 | 8.731 4693 | 40 |
| 21 | 8.719 6430 | 8.722 0422 | 8.724 4282 | 8.726 8011 | 8.729 1611 | 8.731 5083 | 39 |
| 22 | 8.719 6831 | 8.722 0821 | 8.724 4679 | 8.726 8406 | 8.729 2003 | 8.731 5473 | 38 |
| 23 | 8.719 7232 | 8.722 1220 | 8.724 5075 | 8.726 8800 | 8.729 2395 | 8.731 5863 | 37 |
| 24 | 8.719 7633 | 8.722 1618 | 8.724 5472 | 8.726 9194 | 8.729 2788 | 8.731 6253 | 36 |
| 25 | 8.719 8034 | 8.722 2017 | 8.724 5868 | 8.726 9588 | 8.729 3180 | 8.731 6643 | 35 |
| 26 | 8.719 8435 | 8.722 2416 | 8.724 6264 | 8.726 9983 | 8.729 3572 | 8.731 7033 | 34 |
| 27 | 8.719 8836 | 8.722 2814 | 8.724 6661 | 8.727 0377 | 8.729 3964 | 8.731 7423 | 33 |
| 28 | 8.719 9236 | 8.722 3213 | 8.724 7057 | 8.727 0771 | 8.729 4356 | 8.731 7813 | 32 |
| 29 | 8.719 9637 | 8.722 3611 | 8.724 7453 | 8.727 1165 | 8.729 4748 | 8.731 8203 | 31 |
| 30 | 8.720 0038 | 8.722 4010 | 8.724 7850 | 8.727 1559 | 8.729 5140 | 8.731 8593 | 30 |
| 31 | 8.720 0438 | 8.722 4408 | 8.724 8246 | 8.727 1953 | 8.729 5532 | 8.731 8982 | 29 |
| 32 | 8.720 0839 | 8.722 4806 | 8.724 8642 | 8.727 2347 | 8.729 5924 | 8.731 9372 | 28 |
| 33 | 8.720 1239 | 8.722 5205 | 8.724 9038 | 8.727 2741 | 8.729 6315 | 8.731 9762 | 27 |
| 34 | 8.720 1640 | 8.722 5603 | 8.724 9434 | 8.727 3135 | 8.729 6707 | 8.732 0152 | 26 |
| 35 | 8.720 2040 | 8.722 6001 | 8.724 9831 | 8.727 3529 | 8.729 7099 | 8.732 0541 | 25 |
| 36 | 8.720 2441 | 8.722 6400 | 8.725 0227 | 8.727 3923 | 8.729 7491 | 8.732 0931 | 24 |
| 37 | 8.720 2841 | 8.722 6798 | 8.725 0623 | 8.727 4317 | 8.729 7883 | 8.732 1320 | 23 |
| 38 | 8.720 3242 | 8.722 7196 | 8.725 1019 | 8.727 4711 | 8.729 8274 | 8.732 1710 | 22 |
| 39 | 8.720 3642 | 8.722 7594 | 8.725 1414 | 8.727 5105 | 8.729 8666 | 8.732 2100 | 21 |
| 40 | 8.720 4042 | 8.722 7992 | 8.725 1810 | 8.727 5498 | 8.729 9057 | 8.732 2489 | 20 |
| 41 | 8.720 4442 | 8.722 8390 | 8.725 2206 | 8.727 5892 | 8.729 9449 | 8.732 2879 | 19 |
| 42 | 8.720 4843 | 8.722 8788 | 8.725 2602 | 8.727 6286 | 8.729 9841 | 8.732 3268 | 18 |
| 43 | 8.720 5243 | 8.722 9186 | 8.725 2998 | 8.727 6679 | 8.730 0232 | 8.732 3657 | 17 |
| 44 | 8.720 5643 | 8.722 9584 | 8.725 3394 | 8.727 7073 | 8.730 0623 | 8.732 4047 | 16 |
| 45 | 8.720 6043 | 8.722 9982 | 8.725 3789 | 8.727 7467 | 8.730 1015 | 8.732 4436 | 15 |
| 46 | 8.720 6443 | 8.723 0380 | 8.725 4185 | 8.727 7860 | 8.730 1406 | 8.732 4825 | 14 |
| 47 | 8.720 6843 | 8.723 0778 | 8.725 4581 | 8.727 8254 | 8.730 1798 | 8.732 5215 | 13 |
| 48 | 8.720 7243 | 8.723 1175 | 8.725 4976 | 8.727 8647 | 8.730 2189 | 8.732 5604 | 12 |
| 49 | 8.720 7643 | 8.723 1573 | 8.725 5372 | 8.727 9040 | 8.730 2580 | 8.732 5993 | 11 |
| 50 | 8.720 8043 | 8.723 1971 | 8.725 5767 | 8.727 9434 | 8.730 2972 | 8.732 6382 | 10 |
| 51 | 8.720 8443 | 8.723 2369 | 8.725 6163 | 8.727 9827 | 8.730 3363 | 8.732 6771 | 9  |
| 52 | 8.720 8843 | 8.723 2766 | 8.725 6558 | 8.728 0220 | 8.730 3754 | 8.732 7160 | 8  |
| 53 | 8.720 9243 | 8.723 3164 | 8.725 6954 | 8.728 0614 | 8.730 4145 | 8.732 7549 | 7  |
| 54 | 8.720 9642 | 8.723 3561 | 8.725 7349 | 8.728 1007 | 8.730 4536 | 8.732 7938 | 6  |
| 55 | 8.721 0042 | 8.723 3959 | 8.725 7745 | 8.728 1400 | 8.730 4927 | 8.732 8327 | 5  |
| 56 | 8.721 0442 | 8.723 4356 | 8.725 8140 | 8.728 1793 | 8.730 5318 | 8.732 8716 | 4  |
| 57 | 8.721 0841 | 8.723 4754 | 8.725 8535 | 8.728 2186 | 8.730 5709 | 8.732 9105 | 3  |
| 58 | 8.721 1241 | 8.723 5151 | 8.725 8930 | 8.728 2580 | 8.730 6100 | 8.732 9494 | 2  |
| 59 | 8.721 1641 | 8.723 5549 | 8.725 9326 | 8.728 2973 | 8.730 6491 | 8.732 9883 | 1  |
| 60 | 8.721 2040 | 8.723 5946 | 8.725 9721 | 8.728 3366 | 8.730 6882 | 8.733 0272 | 0  |
| "  | 59'        | 58'        | 57'        | 56'        | 55'        | 54'        | "  |



| "  | 0'         | 1'         | 2'         | 3'         | 4'         | 5'         | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.719 3958 | 8.721 8063 | 8.724 2035 | 8.726 5877 | 8.728 9589 | 8.731 3174 | 60 |
| 1  | 8.719 4360 | 8.721 8463 | 8.724 2434 | 8.726 6273 | 8.728 9983 | 8.731 3566 | 59 |
| 2  | 8.719 4763 | 8.721 8864 | 8.724 2832 | 8.726 6669 | 8.729 0378 | 8.731 3958 | 58 |
| 3  | 8.719 5166 | 8.721 9264 | 8.724 3230 | 8.726 7066 | 8.729 0772 | 8.731 4350 | 57 |
| 4  | 8.719 5569 | 8.721 9665 | 8.724 3629 | 8.726 7462 | 8.729 1166 | 8.731 4741 | 56 |
| 5  | 8.719 5971 | 8.722 0065 | 8.724 4027 | 8.726 7858 | 8.729 1560 | 8.731 5133 | 55 |
| 6  | 8.719 6374 | 8.722 0466 | 8.724 4425 | 8.726 8254 | 8.729 1954 | 8.731 5525 | 54 |
| 7  | 8.719 6777 | 8.722 0866 | 8.724 4823 | 8.726 8650 | 8.729 2347 | 8.731 5917 | 53 |
| 8  | 8.719 7179 | 8.722 1267 | 8.724 5222 | 8.726 9046 | 8.729 2741 | 8.731 6309 | 52 |
| 9  | 8.719 7582 | 8.722 1667 | 8.724 5620 | 8.726 9442 | 8.729 3135 | 8.731 6700 | 51 |
| 10 | 8.719 7984 | 8.722 2067 | 8.724 6018 | 8.726 9838 | 8.729 3529 | 8.731 7092 | 50 |
| 11 | 8.719 8387 | 8.722 2467 | 8.724 6416 | 8.727 0234 | 8.729 3923 | 8.731 7484 | 49 |
| 12 | 8.719 8789 | 8.722 2868 | 8.724 6814 | 8.727 0630 | 8.729 4316 | 8.731 7875 | 48 |
| 13 | 8.719 9192 | 8.722 3268 | 8.724 7212 | 8.727 1026 | 8.729 4710 | 8.731 8267 | 47 |
| 14 | 8.719 9594 | 8.722 3668 | 8.724 7610 | 8.727 1421 | 8.729 5104 | 8.731 8658 | 46 |
| 15 | 8.719 9996 | 8.722 4068 | 8.724 8008 | 8.727 1817 | 8.729 5497 | 8.731 9050 | 45 |
| 16 | 8.720 0399 | 8.722 4468 | 8.724 8406 | 8.727 2213 | 8.729 5891 | 8.731 9441 | 44 |
| 17 | 8.720 0801 | 8.722 4868 | 8.724 8804 | 8.727 2609 | 8.729 6284 | 8.731 9833 | 43 |
| 18 | 8.720 1203 | 8.722 5268 | 8.724 9201 | 8.727 3004 | 8.729 6678 | 8.732 0224 | 42 |
| 19 | 8.720 1605 | 8.722 5668 | 8.724 9599 | 8.727 3400 | 8.729 7071 | 8.732 0616 | 41 |
| 20 | 8.720 2007 | 8.722 6068 | 8.724 9997 | 8.727 3795 | 8.729 7465 | 8.732 1007 | 40 |
| 21 | 8.720 2409 | 8.722 6468 | 8.725 0395 | 8.727 4191 | 8.729 7858 | 8.732 1398 | 39 |
| 22 | 8.720 2812 | 8.722 6868 | 8.725 0792 | 8.727 4586 | 8.729 8252 | 8.732 1789 | 38 |
| 23 | 8.720 3214 | 8.722 7268 | 8.725 1190 | 8.727 4982 | 8.729 8645 | 8.732 2181 | 37 |
| 24 | 8.720 3616 | 8.722 7667 | 8.725 1588 | 8.727 5377 | 8.729 9038 | 8.732 2572 | 36 |
| 25 | 8.720 4017 | 8.722 8067 | 8.725 1985 | 8.727 5773 | 8.729 9432 | 8.732 2963 | 35 |
| 26 | 8.720 4419 | 8.722 8467 | 8.725 2383 | 8.727 6168 | 8.729 9825 | 8.732 3354 | 34 |
| 27 | 8.720 4821 | 8.722 8867 | 8.725 2780 | 8.727 6563 | 8.730 0218 | 8.732 3745 | 33 |
| 28 | 8.720 5223 | 8.722 9266 | 8.725 3178 | 8.727 6959 | 8.730 0611 | 8.732 4136 | 32 |
| 29 | 8.720 5625 | 8.722 9666 | 8.725 3575 | 8.727 7354 | 8.730 1004 | 8.732 4527 | 31 |
| 30 | 8.720 6027 | 8.723 0065 | 8.725 3972 | 8.727 7749 | 8.730 1397 | 8.732 4918 | 30 |
| 31 | 8.720 6428 | 8.723 0465 | 8.725 4370 | 8.727 8144 | 8.730 1790 | 8.732 5309 | 29 |
| 32 | 8.720 6830 | 8.723 0864 | 8.725 4767 | 8.727 8540 | 8.730 2183 | 8.732 5700 | 28 |
| 33 | 8.720 7232 | 8.723 1264 | 8.725 5164 | 8.727 8935 | 8.730 2576 | 8.732 6091 | 27 |
| 34 | 8.720 7633 | 8.723 1663 | 8.725 5562 | 8.727 9330 | 8.730 2969 | 8.732 6482 | 26 |
| 35 | 8.720 8035 | 8.723 2063 | 8.725 5959 | 8.727 9725 | 8.730 3362 | 8.732 6873 | 25 |
| 36 | 8.720 8437 | 8.723 2462 | 8.725 6356 | 8.728 0120 | 8.730 3755 | 8.732 7263 | 24 |
| 37 | 8.720 8838 | 8.723 2861 | 8.725 6753 | 8.728 0515 | 8.730 4148 | 8.732 7654 | 23 |
| 38 | 8.720 9239 | 8.723 3261 | 8.725 7150 | 8.728 0910 | 8.730 4541 | 8.732 8045 | 22 |
| 39 | 8.720 9641 | 8.723 3660 | 8.725 7547 | 8.728 1305 | 8.730 4934 | 8.732 8435 | 21 |
| 40 | 8.721 0042 | 8.723 4059 | 8.725 7944 | 8.728 1700 | 8.730 5326 | 8.732 8826 | 20 |
| 41 | 8.721 0444 | 8.723 4458 | 8.725 8341 | 8.728 2094 | 8.730 5719 | 8.732 9217 | 19 |
| 42 | 8.721 0845 | 8.723 4857 | 8.725 8738 | 8.728 2489 | 8.730 6112 | 8.732 9607 | 18 |
| 43 | 8.721 1246 | 8.723 5256 | 8.725 9135 | 8.728 2884 | 8.730 6504 | 8.732 9998 | 17 |
| 44 | 8.721 1648 | 8.723 5655 | 8.725 9532 | 8.728 3279 | 8.730 6897 | 8.733 0388 | 16 |
| 45 | 8.721 2049 | 8.723 6054 | 8.725 9929 | 8.728 3673 | 8.730 7290 | 8.733 0779 | 15 |
| 46 | 8.721 2450 | 8.723 6453 | 8.726 0326 | 8.728 4068 | 8.730 7682 | 8.733 1169 | 14 |
| 47 | 8.721 2851 | 8.723 6852 | 8.726 0722 | 8.728 4463 | 8.730 8075 | 8.733 1560 | 13 |
| 48 | 8.721 3252 | 8.723 7251 | 8.726 1119 | 8.728 4857 | 8.730 8467 | 8.733 1950 | 12 |
| 49 | 8.721 3653 | 8.723 7650 | 8.726 1516 | 8.728 5252 | 8.730 8859 | 8.733 2340 | 11 |
| 50 | 8.721 4054 | 8.723 8049 | 8.726 1912 | 8.728 5646 | 8.730 9252 | 8.733 2730 | 10 |
| 51 | 8.721 4455 | 8.723 8448 | 8.726 2309 | 8.728 6041 | 8.730 9644 | 8.733 3121 | 9  |
| 52 | 8.721 4856 | 8.723 8846 | 8.726 2706 | 8.728 6435 | 8.731 0036 | 8.733 3511 | 8  |
| 53 | 8.721 5257 | 8.723 9245 | 8.726 3102 | 8.728 6830 | 8.731 0429 | 8.733 3901 | 7  |
| 54 | 8.721 5658 | 8.723 9644 | 8.726 3499 | 8.728 7224 | 8.731 0821 | 8.733 4291 | 6  |
| 55 | 8.721 6059 | 8.724 0043 | 8.726 3895 | 8.728 7618 | 8.731 1213 | 8.733 4681 | 5  |
| 56 | 8.721 6460 | 8.724 0441 | 8.726 4292 | 8.728 8013 | 8.731 1605 | 8.733 5071 | 4  |
| 57 | 8.721 6860 | 8.724 0840 | 8.726 4688 | 8.728 8407 | 8.731 1997 | 8.733 5461 | 3  |
| 58 | 8.721 7261 | 8.724 1238 | 8.726 5084 | 8.728 8801 | 8.731 2390 | 8.733 5851 | 2  |
| 59 | 8.721 7662 | 8.724 1637 | 8.726 5481 | 8.728 9195 | 8.731 2782 | 8.733 6241 | 1  |
| 60 | 8.721 8063 | 8.724 2035 | 8.726 5877 | 8.728 9589 | 8.731 3174 | 8.733 6631 | 0  |
| "  | 59'        | 58'        | 57'        | 56'        | 55'        | 54'        | "  |



| "  | 6'         | 7'         | 8'         | 9'         | 10'        | 11'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.733 0272 | 8.735 3535 | 8.737 6675 | 8.739 9691 | 8.742 2586 | 8.744 5360 | 60 |
| 1  | 8.733 0660 | 8.735 3922 | 8.737 7059 | 8.740 0074 | 8.742 2966 | 8.744 5739 | 59 |
| 2  | 8.733 1049 | 8.735 4309 | 8.737 7444 | 8.740 0456 | 8.742 3347 | 8.744 6117 | 58 |
| 3  | 8.733 1438 | 8.735 4695 | 8.737 7828 | 8.740 0839 | 8.742 3728 | 8.744 6496 | 57 |
| 4  | 8.733 1826 | 8.735 5082 | 8.737 8213 | 8.740 1221 | 8.742 4108 | 8.744 6874 | 56 |
| 5  | 8.733 2215 | 8.735 5468 | 8.737 8597 | 8.740 1604 | 8.742 4488 | 8.744 7253 | 55 |
| 6  | 8.733 2604 | 8.735 5855 | 8.737 8982 | 8.740 1986 | 8.742 4869 | 8.744 7631 | 54 |
| 7  | 8.733 2992 | 8.735 6241 | 8.737 9366 | 8.740 2368 | 8.742 5249 | 8.744 8009 | 53 |
| 8  | 8.733 3381 | 8.735 6628 | 8.737 9751 | 8.740 2751 | 8.742 5629 | 8.744 8388 | 52 |
| 9  | 8.733 3769 | 8.735 7014 | 8.738 0135 | 8.740 3133 | 8.742 6010 | 8.744 8766 | 51 |
| 10 | 8.733 4157 | 8.735 7400 | 8.738 0519 | 8.740 3515 | 8.742 6390 | 8.744 9144 | 50 |
| 11 | 8.733 4546 | 8.735 7787 | 8.738 0904 | 8.740 3898 | 8.742 6770 | 8.744 9523 | 49 |
| 12 | 8.733 4934 | 8.735 8173 | 8.738 1288 | 8.740 4280 | 8.742 7150 | 8.744 9901 | 48 |
| 13 | 8.733 5323 | 8.735 8559 | 8.738 1672 | 8.740 4662 | 8.742 7531 | 8.745 0279 | 47 |
| 14 | 8.733 5711 | 8.735 8946 | 8.738 2056 | 8.740 5044 | 8.742 7911 | 8.745 0657 | 46 |
| 15 | 8.733 6099 | 8.735 9332 | 8.738 2440 | 8.740 5426 | 8.742 8291 | 8.745 1035 | 45 |
| 16 | 8.733 6487 | 8.735 9718 | 8.738 2824 | 8.740 5808 | 8.742 8671 | 8.745 1413 | 44 |
| 17 | 8.733 6876 | 8.736 0104 | 8.738 3208 | 8.740 6190 | 8.742 9051 | 8.745 1791 | 43 |
| 18 | 8.733 7264 | 8.736 0490 | 8.738 3593 | 8.740 6572 | 8.742 9431 | 8.745 2169 | 42 |
| 19 | 8.733 7652 | 8.736 0876 | 8.738 3977 | 8.740 6954 | 8.742 9811 | 8.745 2547 | 41 |
| 20 | 8.733 8040 | 8.736 1262 | 8.738 4360 | 8.740 7336 | 8.743 0191 | 8.745 2925 | 40 |
| 21 | 8.733 8428 | 8.736 1648 | 8.738 4744 | 8.740 7718 | 8.743 0571 | 8.745 3303 | 39 |
| 22 | 8.733 8816 | 8.736 2034 | 8.738 5128 | 8.740 8100 | 8.743 0950 | 8.745 3681 | 38 |
| 23 | 8.733 9204 | 8.736 2420 | 8.738 5512 | 8.740 8482 | 8.743 1330 | 8.745 4059 | 37 |
| 24 | 8.733 9592 | 8.736 2806 | 8.738 5896 | 8.740 8864 | 8.743 1710 | 8.745 4437 | 36 |
| 25 | 8.733 9980 | 8.736 3192 | 8.738 6280 | 8.740 9245 | 8.743 2090 | 8.745 4814 | 35 |
| 26 | 8.734 0368 | 8.736 3578 | 8.738 6664 | 8.740 9627 | 8.743 2470 | 8.745 5192 | 34 |
| 27 | 8.734 0756 | 8.736 3963 | 8.738 7047 | 8.741 0009 | 8.743 2849 | 8.745 5570 | 33 |
| 28 | 8.734 1143 | 8.736 4349 | 8.738 7431 | 8.741 0390 | 8.743 3229 | 8.745 5947 | 32 |
| 29 | 8.734 1531 | 8.736 4735 | 8.738 7815 | 8.741 0772 | 8.743 3608 | 8.745 6325 | 31 |
| 30 | 8.734 1919 | 8.736 5120 | 8.738 8198 | 8.741 1154 | 8.743 3988 | 8.745 6703 | 30 |
| 31 | 8.734 2307 | 8.736 5506 | 8.738 8582 | 8.741 1535 | 8.743 4368 | 8.745 7080 | 29 |
| 32 | 8.734 2694 | 8.736 5892 | 8.738 8965 | 8.741 1917 | 8.743 4747 | 8.745 7458 | 28 |
| 33 | 8.734 3082 | 8.736 6277 | 8.738 9349 | 8.741 2298 | 8.743 5127 | 8.745 7835 | 27 |
| 34 | 8.734 3470 | 8.736 6663 | 8.738 9732 | 8.741 2680 | 8.743 5506 | 8.745 8213 | 26 |
| 35 | 8.734 3857 | 8.736 7048 | 8.739 0116 | 8.741 3061 | 8.743 5886 | 8.745 8590 | 25 |
| 36 | 8.734 4245 | 8.736 7434 | 8.739 0499 | 8.741 3443 | 8.743 6265 | 8.745 8968 | 24 |
| 37 | 8.734 4632 | 8.736 7819 | 8.739 0883 | 8.741 3824 | 8.743 6644 | 8.745 9345 | 23 |
| 38 | 8.734 5020 | 8.736 8205 | 8.739 1266 | 8.741 4205 | 8.743 7024 | 8.745 9722 | 22 |
| 39 | 8.734 5407 | 8.736 8590 | 8.739 1649 | 8.741 4587 | 8.743 7403 | 8.746 0100 | 21 |
| 40 | 8.734 5795 | 8.736 8975 | 8.739 2033 | 8.741 4968 | 8.743 7782 | 8.746 0477 | 20 |
| 41 | 8.734 6182 | 8.736 9361 | 8.739 2416 | 8.741 5349 | 8.743 8161 | 8.746 0854 | 19 |
| 42 | 8.734 6569 | 8.736 9746 | 8.739 2799 | 8.741 5730 | 8.743 8541 | 8.746 1231 | 18 |
| 43 | 8.734 6957 | 8.737 0131 | 8.739 3182 | 8.741 6111 | 8.743 8920 | 8.746 1608 | 17 |
| 44 | 8.734 7344 | 8.737 0516 | 8.739 3565 | 8.741 6492 | 8.743 9299 | 8.746 1986 | 16 |
| 45 | 8.734 7731 | 8.737 0901 | 8.739 3949 | 8.741 6874 | 8.743 9678 | 8.746 2363 | 15 |
| 46 | 8.734 8118 | 8.737 1287 | 8.739 4332 | 8.741 7255 | 8.744 0057 | 8.746 2740 | 14 |
| 47 | 8.734 8505 | 8.737 1672 | 8.739 4715 | 8.741 7636 | 8.744 0436 | 8.746 3117 | 13 |
| 48 | 8.734 8893 | 8.737 2057 | 8.739 5098 | 8.741 8017 | 8.744 0815 | 8.746 3494 | 12 |
| 49 | 8.734 9280 | 8.737 2442 | 8.739 5481 | 8.741 8398 | 8.744 1194 | 8.746 3871 | 11 |
| 50 | 8.734 9667 | 8.737 2827 | 8.739 5864 | 8.741 8779 | 8.744 1573 | 8.746 4248 | 10 |
| 51 | 8.735 0054 | 8.737 3212 | 8.739 6247 | 8.741 9159 | 8.744 1952 | 8.746 4625 | 9  |
| 52 | 8.735 0441 | 8.737 3597 | 8.739 6629 | 8.741 9540 | 8.744 2331 | 8.746 5002 | 8  |
| 53 | 8.735 0828 | 8.737 3981 | 8.739 7012 | 8.741 9921 | 8.744 2709 | 8.746 5378 | 7  |
| 54 | 8.735 1215 | 8.737 4366 | 8.739 7395 | 8.742 0302 | 8.744 3088 | 8.746 5755 | 6  |
| 55 | 8.735 1601 | 8.737 4751 | 8.739 7778 | 8.742 0683 | 8.744 3467 | 8.746 6132 | 5  |
| 56 | 8.735 1988 | 8.737 5136 | 8.739 8161 | 8.742 1063 | 8.744 3846 | 8.746 6509 | 4  |
| 57 | 8.735 2375 | 8.737 5521 | 8.739 8543 | 8.742 1444 | 8.744 4224 | 8.746 6885 | 3  |
| 58 | 8.735 2762 | 8.737 5905 | 8.739 8926 | 8.742 1825 | 8.744 4603 | 8.746 7262 | 2  |
| 59 | 8.735 3149 | 8.737 6290 | 8.739 9309 | 8.742 2205 | 8.744 4982 | 8.746 7639 | 1  |
| 60 | 8.735 3535 | 8.737 6675 | 8.739 9691 | 8.742 2586 | 8.744 5360 | 8.746 8015 | 0  |
|    | 58'        | 52'        | 51'        | 50'        | 49'        | 48'        |    |



| "  | 6'         | 7'         | 8'         | 9'         | 10'        | 11'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.733 6631 | 8.735 9964 | 8.738 3172 | 8.740 6258 | 8.742 9222 | 8.745 2067 | 60 |
| 1  | 8.733 7021 | 8.736 0352 | 8.738 3558 | 8.740 6642 | 8.742 9604 | 8.745 2447 | 59 |
| 2  | 8.733 7411 | 8.736 0739 | 8.738 3944 | 8.740 7025 | 8.742 9986 | 8.745 2826 | 58 |
| 3  | 8.733 7801 | 8.736 1127 | 8.738 4329 | 8.740 7409 | 8.743 0367 | 8.745 3206 | 57 |
| 4  | 8.733 8191 | 8.736 1515 | 8.738 4715 | 8.740 7793 | 8.743 0749 | 8.745 3585 | 56 |
| 5  | 8.733 8580 | 8.736 1902 | 8.738 5101 | 8.740 8176 | 8.743 1131 | 8.745 3965 | 55 |
| 6  | 8.733 8970 | 8.736 2290 | 8.738 5486 | 8.740 8560 | 8.743 1512 | 8.745 4345 | 54 |
| 7  | 8.733 9360 | 8.736 2678 | 8.738 5872 | 8.740 8943 | 8.743 1894 | 8.745 4724 | 53 |
| 8  | 8.733 9750 | 8.736 3065 | 8.738 6257 | 8.740 9327 | 8.743 2275 | 8.745 5104 | 52 |
| 9  | 8.734 0139 | 8.736 3453 | 8.738 6643 | 8.740 9710 | 8.743 2657 | 8.745 5483 | 51 |
| 10 | 8.734 0529 | 8.736 3840 | 8.738 7028 | 8.741 0094 | 8.743 3038 | 8.745 5863 | 50 |
| 11 | 8.734 0918 | 8.736 4228 | 8.738 7414 | 8.741 0477 | 8.743 3419 | 8.745 6242 | 49 |
| 12 | 8.734 1308 | 8.736 4615 | 8.738 7799 | 8.741 0860 | 8.743 3801 | 8.745 6621 | 48 |
| 13 | 8.734 1697 | 8.736 5003 | 8.738 8184 | 8.741 1244 | 8.743 4182 | 8.745 7001 | 47 |
| 14 | 8.734 2087 | 8.736 5390 | 8.738 8570 | 8.741 1627 | 8.743 4563 | 8.745 7380 | 46 |
| 15 | 8.734 2476 | 8.736 5777 | 8.738 8955 | 8.741 2010 | 8.743 4945 | 8.745 7759 | 45 |
| 16 | 8.734 2865 | 8.736 6165 | 8.738 9340 | 8.741 2394 | 8.743 5326 | 8.745 8138 | 44 |
| 17 | 8.734 3255 | 8.736 6552 | 8.738 9725 | 8.741 2777 | 8.743 5707 | 8.745 8518 | 43 |
| 18 | 8.734 3644 | 8.736 6939 | 8.739 0111 | 8.741 3160 | 8.743 6088 | 8.745 8897 | 42 |
| 19 | 8.734 4033 | 8.736 7326 | 8.739 0496 | 8.741 3543 | 8.743 6469 | 8.745 9276 | 41 |
| 20 | 8.734 4423 | 8.736 7714 | 8.739 0881 | 8.741 3926 | 8.743 6850 | 8.745 9655 | 40 |
| 21 | 8.734 4812 | 8.736 8101 | 8.739 1266 | 8.741 4309 | 8.743 7232 | 8.746 0034 | 39 |
| 22 | 8.734 5201 | 8.736 8488 | 8.739 1651 | 8.741 4692 | 8.743 7613 | 8.746 0413 | 38 |
| 23 | 8.734 5590 | 8.736 8875 | 8.739 2036 | 8.741 5075 | 8.743 7994 | 8.746 0792 | 37 |
| 24 | 8.734 5979 | 8.736 9262 | 8.739 2421 | 8.741 5458 | 8.743 8374 | 8.746 1171 | 36 |
| 25 | 8.734 6368 | 8.736 9649 | 8.739 2806 | 8.741 5841 | 8.743 8755 | 8.746 1550 | 35 |
| 26 | 8.734 6757 | 8.737 0036 | 8.739 3191 | 8.741 6224 | 8.743 9136 | 8.746 1929 | 34 |
| 27 | 8.734 7146 | 8.737 0423 | 8.739 3576 | 8.741 6607 | 8.743 9517 | 8.746 2308 | 33 |
| 28 | 8.734 7535 | 8.737 0810 | 8.739 3961 | 8.741 6990 | 8.743 9898 | 8.746 2687 | 32 |
| 29 | 8.734 7924 | 8.737 1196 | 8.739 4345 | 8.741 7372 | 8.744 0279 | 8.746 3066 | 31 |
| 30 | 8.734 8313 | 8.737 1583 | 8.739 4730 | 8.741 7755 | 8.744 0660 | 8.746 3444 | 30 |
| 31 | 8.734 8702 | 8.737 1970 | 8.739 5115 | 8.741 8138 | 8.744 1040 | 8.746 3823 | 29 |
| 32 | 8.734 9091 | 8.737 2357 | 8.739 5500 | 8.741 8521 | 8.744 1421 | 8.746 4202 | 28 |
| 33 | 8.734 9480 | 8.737 2744 | 8.739 5884 | 8.741 8903 | 8.744 1802 | 8.746 4580 | 27 |
| 34 | 8.734 9868 | 8.737 3130 | 8.739 6269 | 8.741 9286 | 8.744 2182 | 8.746 4959 | 26 |
| 35 | 8.735 0257 | 8.737 3517 | 8.739 6654 | 8.741 9669 | 8.744 2563 | 8.746 5338 | 25 |
| 36 | 8.735 0646 | 8.737 3904 | 8.739 7038 | 8.742 0051 | 8.744 2943 | 8.746 5716 | 24 |
| 37 | 8.735 1034 | 8.737 4290 | 8.739 7423 | 8.742 0434 | 8.744 3324 | 8.746 6095 | 23 |
| 38 | 8.735 1423 | 8.737 4677 | 8.739 7807 | 8.742 0816 | 8.744 3704 | 8.746 6473 | 22 |
| 39 | 8.735 1812 | 8.737 5063 | 8.739 8192 | 8.742 1199 | 8.744 4085 | 8.746 6852 | 21 |
| 40 | 8.735 2200 | 8.737 5450 | 8.739 8576 | 8.742 1581 | 8.744 4465 | 8.746 7230 | 20 |
| 41 | 8.735 2589 | 8.737 5836 | 8.739 8961 | 8.742 1963 | 8.744 4846 | 8.746 7609 | 19 |
| 42 | 8.735 2977 | 8.737 6223 | 8.739 9345 | 8.742 2346 | 8.744 5226 | 8.746 7987 | 18 |
| 43 | 8.735 3365 | 8.737 6609 | 8.739 9729 | 8.742 2728 | 8.744 5606 | 8.746 8365 | 17 |
| 44 | 8.735 3754 | 8.737 6995 | 8.740 0114 | 8.742 3110 | 8.744 5987 | 8.746 8744 | 16 |
| 45 | 8.735 4142 | 8.737 7382 | 8.740 0498 | 8.742 3493 | 8.744 6367 | 8.746 9122 | 15 |
| 46 | 8.735 4531 | 8.737 7768 | 8.740 0882 | 8.742 3875 | 8.744 6747 | 8.746 9500 | 14 |
| 47 | 8.735 4919 | 8.737 8154 | 8.740 1266 | 8.742 4257 | 8.744 7127 | 8.746 9879 | 13 |
| 48 | 8.735 5307 | 8.737 8540 | 8.740 1651 | 8.742 4639 | 8.744 7507 | 8.747 0257 | 12 |
| 49 | 8.735 5695 | 8.737 8926 | 8.740 2035 | 8.742 5021 | 8.744 7888 | 8.747 0635 | 11 |
| 50 | 8.735 6084 | 8.737 9313 | 8.740 2419 | 8.742 5403 | 8.744 8268 | 8.747 1013 | 10 |
| 51 | 8.735 6472 | 8.737 9699 | 8.740 2803 | 8.742 5785 | 8.744 8648 | 8.747 1391 | 9  |
| 52 | 8.735 6860 | 8.738 0085 | 8.740 3187 | 8.742 6167 | 8.744 9028 | 8.747 1769 | 8  |
| 53 | 8.735 7248 | 8.738 0471 | 8.740 3571 | 8.742 6549 | 8.744 9408 | 8.747 2147 | 7  |
| 54 | 8.735 7636 | 8.738 0857 | 8.740 3955 | 8.742 6931 | 8.744 9788 | 8.747 2525 | 6  |
| 55 | 8.735 8024 | 8.738 1243 | 8.740 4339 | 8.742 7313 | 8.745 0168 | 8.747 2903 | 5  |
| 56 | 8.735 8412 | 8.738 1629 | 8.740 4723 | 8.742 7695 | 8.745 0548 | 8.747 3281 | 4  |
| 57 | 8.735 8800 | 8.738 2015 | 8.740 5107 | 8.742 8077 | 8.745 0927 | 8.747 3659 | 3  |
| 58 | 8.735 9188 | 8.738 2400 | 8.740 5490 | 8.742 8459 | 8.745 1307 | 8.747 4037 | 2  |
| 59 | 8.735 9576 | 8.738 2786 | 8.740 5874 | 8.742 8841 | 8.745 1687 | 8.747 4415 | 1  |
| 60 | 8.735 9964 | 8.738 3172 | 8.740 6258 | 8.742 9222 | 8.745 2067 | 8.747 4792 | 0  |
| "  | 58'        | 52'        | 51'        | 50'        | 49'        | 48'        | "  |

cotg 86°



| "  | 12'        | 13'        | 14'        | 15'        | 16'        | 17'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.746 8015 | 8.749 0551 | 8.751 3073 | 8.753 5595 | 8.755 8117 | 8.758 0639 | 60 |
| 1  | 8.746 8392 | 8.749 0927 | 8.751 3446 | 8.753 5968 | 8.755 8490 | 8.758 0911 | 59 |
| 2  | 8.746 8769 | 8.749 1304 | 8.751 3818 | 8.753 6340 | 8.755 8862 | 8.758 1283 | 58 |
| 3  | 8.746 9145 | 8.749 1676 | 8.751 4191 | 8.753 6713 | 8.755 9234 | 8.758 1655 | 57 |
| 4  | 8.746 9522 | 8.749 2051 | 8.751 4563 | 8.753 7085 | 8.755 9606 | 8.758 2027 | 56 |
| 5  | 8.746 9898 | 8.749 2425 | 8.751 4936 | 8.753 7458 | 8.755 9978 | 8.758 2399 | 55 |
| 6  | 8.747 0274 | 8.749 2800 | 8.751 5308 | 8.753 7830 | 8.756 0350 | 8.758 2771 | 54 |
| 7  | 8.747 0651 | 8.749 3174 | 8.751 5681 | 8.753 8203 | 8.756 0722 | 8.758 3143 | 53 |
| 8  | 8.747 1027 | 8.749 3549 | 8.751 6053 | 8.753 8575 | 8.756 1094 | 8.758 3515 | 52 |
| 9  | 8.747 1403 | 8.749 3923 | 8.751 6426 | 8.753 8948 | 8.756 1466 | 8.758 3887 | 51 |
| 10 | 8.747 1780 | 8.749 4297 | 8.751 6798 | 8.753 9320 | 8.756 1838 | 8.758 4259 | 50 |
| 11 | 8.747 2156 | 8.749 4672 | 8.751 7171 | 8.753 9693 | 8.756 2210 | 8.758 4631 | 49 |
| 12 | 8.747 2532 | 8.749 5046 | 8.751 7543 | 8.754 0065 | 8.756 2582 | 8.758 5003 | 48 |
| 13 | 8.747 2908 | 8.749 5420 | 8.751 7916 | 8.754 0438 | 8.756 2954 | 8.758 5375 | 47 |
| 14 | 8.747 3285 | 8.749 5793 | 8.751 8288 | 8.754 0810 | 8.756 3326 | 8.758 5747 | 46 |
| 15 | 8.747 3661 | 8.749 6168 | 8.751 8661 | 8.754 1183 | 8.756 3698 | 8.758 6119 | 45 |
| 16 | 8.747 4037 | 8.749 6541 | 8.751 9033 | 8.754 1555 | 8.756 4070 | 8.758 6491 | 44 |
| 17 | 8.747 4413 | 8.749 6917 | 8.751 9406 | 8.754 1928 | 8.756 4442 | 8.758 6863 | 43 |
| 18 | 8.747 4789 | 8.749 7291 | 8.751 9778 | 8.754 2300 | 8.756 4814 | 8.758 7235 | 42 |
| 19 | 8.747 5165 | 8.749 7665 | 8.752 0151 | 8.754 2673 | 8.756 5186 | 8.758 7607 | 41 |
| 20 | 8.747 5541 | 8.749 8039 | 8.752 0523 | 8.754 3045 | 8.756 5558 | 8.758 7979 | 40 |
| 21 | 8.747 5917 | 8.749 8414 | 8.752 0896 | 8.754 3418 | 8.756 5930 | 8.758 8351 | 39 |
| 22 | 8.747 6293 | 8.749 8787 | 8.752 1268 | 8.754 3790 | 8.756 6302 | 8.758 8723 | 38 |
| 23 | 8.747 6669 | 8.749 9161 | 8.752 1641 | 8.754 4163 | 8.756 6674 | 8.758 9095 | 37 |
| 24 | 8.747 7044 | 8.749 9535 | 8.752 1994 | 8.754 4535 | 8.756 7046 | 8.758 9467 | 36 |
| 25 | 8.747 7420 | 8.749 9909 | 8.752 2367 | 8.754 4908 | 8.756 7418 | 8.758 9839 | 35 |
| 26 | 8.747 7796 | 8.750 0282 | 8.752 2739 | 8.754 5280 | 8.756 7790 | 8.759 0211 | 34 |
| 27 | 8.747 8172 | 8.750 0656 | 8.752 3112 | 8.754 5653 | 8.756 8162 | 8.759 0583 | 33 |
| 28 | 8.747 8547 | 8.750 1030 | 8.752 3484 | 8.754 6025 | 8.756 8534 | 8.759 0955 | 32 |
| 29 | 8.747 8923 | 8.750 1403 | 8.752 3857 | 8.754 6398 | 8.756 8906 | 8.759 1327 | 31 |
| 30 | 8.747 9299 | 8.750 1777 | 8.752 4229 | 8.754 6770 | 8.756 9278 | 8.759 1699 | 30 |
| 31 | 8.747 9674 | 8.750 2151 | 8.752 4602 | 8.754 7143 | 8.756 9650 | 8.759 2071 | 29 |
| 32 | 8.748 0050 | 8.750 2524 | 8.752 4974 | 8.754 7515 | 8.756 9992 | 8.759 2443 | 28 |
| 33 | 8.748 0425 | 8.750 2898 | 8.752 5347 | 8.754 7888 | 8.757 0364 | 8.759 2815 | 27 |
| 34 | 8.748 0801 | 8.750 3272 | 8.752 5719 | 8.754 8260 | 8.757 0736 | 8.759 3187 | 26 |
| 35 | 8.748 1176 | 8.750 3645 | 8.752 6092 | 8.754 8633 | 8.757 1108 | 8.759 3559 | 25 |
| 36 | 8.748 1552 | 8.750 4019 | 8.752 6464 | 8.754 9005 | 8.757 1480 | 8.759 3931 | 24 |
| 37 | 8.748 1927 | 8.750 4393 | 8.752 6837 | 8.754 9378 | 8.757 1852 | 8.759 4303 | 23 |
| 38 | 8.748 2303 | 8.750 4766 | 8.752 7209 | 8.754 9750 | 8.757 2224 | 8.759 4675 | 22 |
| 39 | 8.748 2678 | 8.750 5140 | 8.752 7582 | 8.755 0123 | 8.757 2596 | 8.759 5047 | 21 |
| 40 | 8.748 3054 | 8.750 5513 | 8.752 7954 | 8.755 0495 | 8.757 2968 | 8.759 5419 | 20 |
| 41 | 8.748 3429 | 8.750 5887 | 8.752 8327 | 8.755 0868 | 8.757 3340 | 8.759 5791 | 19 |
| 42 | 8.748 3805 | 8.750 6260 | 8.752 8699 | 8.755 1240 | 8.757 3712 | 8.759 6163 | 18 |
| 43 | 8.748 4179 | 8.750 6634 | 8.752 9072 | 8.755 1613 | 8.757 4084 | 8.759 6535 | 17 |
| 44 | 8.748 4555 | 8.750 7007 | 8.752 9444 | 8.755 1985 | 8.757 4456 | 8.759 6907 | 16 |
| 45 | 8.748 4929 | 8.750 7381 | 8.752 9817 | 8.755 2358 | 8.757 4828 | 8.759 7279 | 15 |
| 46 | 8.748 5304 | 8.750 7754 | 8.753 0189 | 8.755 2730 | 8.757 5200 | 8.759 7651 | 14 |
| 47 | 8.748 5680 | 8.750 8128 | 8.753 0562 | 8.755 3103 | 8.757 5572 | 8.759 8023 | 13 |
| 48 | 8.748 6055 | 8.750 8501 | 8.753 0934 | 8.755 3475 | 8.757 5944 | 8.759 8395 | 12 |
| 49 | 8.748 6430 | 8.750 8875 | 8.753 1307 | 8.755 3848 | 8.757 6316 | 8.759 8767 | 11 |
| 50 | 8.748 6805 | 8.750 9248 | 8.753 1679 | 8.755 4220 | 8.757 6688 | 8.759 9139 | 10 |
| 51 | 8.748 7180 | 8.750 9622 | 8.753 2052 | 8.755 4593 | 8.757 7060 | 8.759 9511 | 9  |
| 52 | 8.748 7554 | 8.750 9995 | 8.753 2424 | 8.755 4965 | 8.757 7432 | 8.759 9883 | 8  |
| 53 | 8.748 7929 | 8.751 0369 | 8.753 2797 | 8.755 5338 | 8.757 7804 | 8.759 1025 | 7  |
| 54 | 8.748 8304 | 8.751 0742 | 8.753 3169 | 8.755 5710 | 8.757 8176 | 8.759 1397 | 6  |
| 55 | 8.748 8679 | 8.751 1116 | 8.753 3542 | 8.755 6083 | 8.757 8548 | 8.759 1769 | 5  |
| 56 | 8.748 9054 | 8.751 1489 | 8.753 3914 | 8.755 6455 | 8.757 8920 | 8.759 2141 | 4  |
| 57 | 8.748 9429 | 8.751 1863 | 8.753 4287 | 8.755 6828 | 8.757 9292 | 8.759 2513 | 3  |
| 58 | 8.748 9803 | 8.751 2236 | 8.753 4659 | 8.755 7200 | 8.757 9664 | 8.759 2885 | 2  |
| 59 | 8.749 0178 | 8.751 2610 | 8.753 5032 | 8.755 7573 | 8.757 1036 | 8.759 3257 | 1  |
| 60 | 8.749 0553 | 8.751 2973 | 8.753 5404 | 8.755 7945 | 8.757 1408 | 8.759 3629 | 0  |
| "  | 47'        | 46'        | 45'        | 44'        | 43'        | 42'        | "  |



| "  | 12'        | 13'        | 14'        | 15'        | 16'        | 17'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.747 4792 | 8.749 7400 | 8.751 9892 | 8.754 2269 | 8.756 4531 | 8.758 6681 | 60 |
| 1  | 8.747 5170 | 8.749 7776 | 8.752 0266 | 8.754 2641 | 8.756 4901 | 8.758 7049 | 59 |
| 2  | 8.747 5548 | 8.749 8154 | 8.752 0640 | 8.754 3013 | 8.756 5271 | 8.758 7417 | 58 |
| 3  | 8.747 5926 | 8.749 8528 | 8.752 1014 | 8.754 3384 | 8.756 5641 | 8.758 7786 | 57 |
| 4  | 8.747 6304 | 8.749 8903 | 8.752 1387 | 8.754 3756 | 8.756 6011 | 8.758 8154 | 56 |
| 5  | 8.747 6681 | 8.749 9279 | 8.752 1761 | 8.754 4128 | 8.756 6381 | 8.758 8522 | 55 |
| 6  | 8.747 7058 | 8.749 9655 | 8.752 2135 | 8.754 4500 | 8.756 6751 | 8.758 8890 | 54 |
| 7  | 8.747 7436 | 8.750 0030 | 8.752 2509 | 8.754 4872 | 8.756 7121 | 8.758 9258 | 53 |
| 8  | 8.747 7814 | 8.750 0406 | 8.752 2882 | 8.754 5244 | 8.756 7491 | 8.758 9626 | 52 |
| 9  | 8.747 8191 | 8.750 0782 | 8.752 3256 | 8.754 5615 | 8.756 7861 | 8.758 9994 | 51 |
| 10 | 8.747 8569 | 8.750 1157 | 8.752 3629 | 8.754 5987 | 8.756 8231 | 8.759 0362 | 50 |
| 11 | 8.747 8946 | 8.750 1533 | 8.752 4003 | 8.754 6359 | 8.756 8600 | 8.759 0730 | 49 |
| 12 | 8.747 9324 | 8.750 1908 | 8.752 4377 | 8.754 6730 | 8.756 8970 | 8.759 1097 | 48 |
| 13 | 8.747 9701 | 8.750 2283 | 8.752 4750 | 8.754 7102 | 8.756 9340 | 8.759 1465 | 47 |
| 14 | 8.748 0078 | 8.750 2659 | 8.752 5124 | 8.754 7473 | 8.756 9710 | 8.759 1833 | 46 |
| 15 | 8.748 0455 | 8.750 3034 | 8.752 5497 | 8.754 7845 | 8.757 0079 | 8.759 2201 | 45 |
| 16 | 8.748 0833 | 8.750 3410 | 8.752 5870 | 8.754 8216 | 8.757 0449 | 8.759 2569 | 44 |
| 17 | 8.748 1210 | 8.750 3785 | 8.752 6244 | 8.754 8588 | 8.757 0818 | 8.759 2936 | 43 |
| 18 | 8.748 1587 | 8.750 4160 | 8.752 6617 | 8.754 8959 | 8.757 1188 | 8.759 3304 | 42 |
| 19 | 8.748 1964 | 8.750 4535 | 8.752 6990 | 8.754 9331 | 8.757 1557 | 8.759 3672 | 41 |
| 20 | 8.748 2341 | 8.750 4911 | 8.752 7364 | 8.754 9702 | 8.757 1927 | 8.759 4039 | 40 |
| 21 | 8.748 2718 | 8.750 5286 | 8.752 7737 | 8.755 0073 | 8.757 2296 | 8.759 4407 | 39 |
| 22 | 8.748 3096 | 8.750 5661 | 8.752 8110 | 8.755 0445 | 8.757 2666 | 8.759 4774 | 38 |
| 23 | 8.748 3473 | 8.750 6036 | 8.752 8483 | 8.755 0816 | 8.757 3035 | 8.759 5142 | 37 |
| 24 | 8.748 3850 | 8.750 6411 | 8.752 8856 | 8.755 1187 | 8.757 3405 | 8.759 5510 | 36 |
| 25 | 8.748 4227 | 8.750 6786 | 8.752 9230 | 8.755 1558 | 8.757 3774 | 8.759 5877 | 35 |
| 26 | 8.748 4604 | 8.750 7161 | 8.752 9603 | 8.755 1930 | 8.757 4143 | 8.759 6244 | 34 |
| 27 | 8.748 4981 | 8.750 7536 | 8.752 9976 | 8.755 2301 | 8.757 4512 | 8.759 6612 | 33 |
| 28 | 8.748 5357 | 8.750 7911 | 8.753 0349 | 8.755 2672 | 8.757 4882 | 8.759 6979 | 32 |
| 29 | 8.748 5734 | 8.750 8286 | 8.753 0722 | 8.755 3043 | 8.757 5251 | 8.759 7347 | 31 |
| 30 | 8.748 6111 | 8.750 8661 | 8.753 1095 | 8.755 3414 | 8.757 5620 | 8.759 7714 | 30 |
| 31 | 8.748 6488 | 8.750 9036 | 8.753 1468 | 8.755 3785 | 8.757 5989 | 8.759 8081 | 29 |
| 32 | 8.748 6865 | 8.750 9410 | 8.753 1840 | 8.755 4156 | 8.757 6358 | 8.759 8448 | 28 |
| 33 | 8.748 7241 | 8.750 9785 | 8.753 2213 | 8.755 4527 | 8.757 6727 | 8.759 8816 | 27 |
| 34 | 8.748 7618 | 8.751 0160 | 8.753 2586 | 8.755 4898 | 8.757 7097 | 8.759 9184 | 26 |
| 35 | 8.748 7995 | 8.751 0535 | 8.753 2959 | 8.755 5269 | 8.757 7466 | 8.759 9551 | 25 |
| 36 | 8.748 8371 | 8.751 0909 | 8.753 3332 | 8.755 5640 | 8.757 7835 | 8.759 9917 | 24 |
| 37 | 8.748 8748 | 8.751 1284 | 8.753 3704 | 8.755 6011 | 8.757 8204 | 8.760 0284 | 23 |
| 38 | 8.748 9124 | 8.751 1659 | 8.753 4077 | 8.755 6382 | 8.757 8572 | 8.760 0651 | 22 |
| 39 | 8.748 9501 | 8.751 2034 | 8.753 4450 | 8.755 6752 | 8.757 8941 | 8.760 1018 | 21 |
| 40 | 8.748 9877 | 8.751 2408 | 8.753 4824 | 8.755 7123 | 8.757 9310 | 8.760 1385 | 20 |
| 41 | 8.749 0254 | 8.751 2782 | 8.753 5195 | 8.755 7494 | 8.757 9679 | 8.760 1752 | 19 |
| 42 | 8.749 0630 | 8.751 3157 | 8.753 5568 | 8.755 7864 | 8.758 0048 | 8.760 2119 | 18 |
| 43 | 8.749 1007 | 8.751 3531 | 8.753 5940 | 8.755 8235 | 8.758 0417 | 8.760 2486 | 17 |
| 44 | 8.749 1383 | 8.751 3906 | 8.753 6313 | 8.755 8606 | 8.758 0785 | 8.760 2853 | 16 |
| 45 | 8.749 1759 | 8.751 4280 | 8.753 6686 | 8.755 8976 | 8.758 1154 | 8.760 3220 | 15 |
| 46 | 8.749 2136 | 8.751 4654 | 8.753 7058 | 8.755 9347 | 8.758 1523 | 8.760 3587 | 14 |
| 47 | 8.749 2512 | 8.751 5029 | 8.753 7430 | 8.755 9717 | 8.758 1891 | 8.760 3954 | 13 |
| 48 | 8.749 2888 | 8.751 5403 | 8.753 7802 | 8.756 0088 | 8.758 2260 | 8.760 4320 | 12 |
| 49 | 8.749 3264 | 8.751 5777 | 8.753 8175 | 8.756 0458 | 8.758 2629 | 8.760 4687 | 11 |
| 50 | 8.749 3641 | 8.751 6152 | 8.753 8547 | 8.756 0829 | 8.758 2997 | 8.760 5054 | 10 |
| 51 | 8.749 4017 | 8.751 6526 | 8.753 8919 | 8.756 1199 | 8.758 3366 | 8.760 5420 | 9  |
| 52 | 8.749 4394 | 8.751 6900 | 8.753 9292 | 8.756 1569 | 8.758 3733 | 8.760 5787 | 8  |
| 53 | 8.749 4769 | 8.751 7274 | 8.753 9664 | 8.756 1940 | 8.758 4103 | 8.760 6154 | 7  |
| 54 | 8.749 5145 | 8.751 7648 | 8.754 0036 | 8.756 2310 | 8.758 4471 | 8.760 6520 | 6  |
| 55 | 8.749 5521 | 8.751 8022 | 8.754 0408 | 8.756 2680 | 8.758 4839 | 8.760 6887 | 5  |
| 56 | 8.749 5897 | 8.751 8396 | 8.754 0780 | 8.756 3051 | 8.758 5208 | 8.760 7253 | 4  |
| 57 | 8.749 6273 | 8.751 8770 | 8.754 1153 | 8.756 3421 | 8.758 5576 | 8.760 7620 | 3  |
| 58 | 8.749 6649 | 8.751 9144 | 8.754 1525 | 8.756 3791 | 8.758 5944 | 8.760 7986 | 2  |
| 59 | 8.749 7025 | 8.751 9518 | 8.754 1897 | 8.756 4161 | 8.758 6313 | 8.760 8353 | 1  |
| 60 | 8.749 7400 | 8.751 9892 | 8.754 2269 | 8.756 4531 | 8.758 6681 | 8.760 8719 | 0  |
| "  | 47'        | 46'        | 45'        | 44'        | 43'        | 42'        | "  |

cont. 86°



| "  | 18'        | 19'         | 20'         | 21'         | 22'         | 23'         | "  |
|----|------------|-------------|-------------|-------------|-------------|-------------|----|
| 0  | 8.760 1512 | 8.762 3366  | 8.764 5111  | 8.766 6854  | 8.768 8595  | 8.770 10307 | 60 |
| 1  | 8.760 1877 | 8.762 3730  | 8.764 5473  | 8.766 6815  | 8.768 8556  | 8.770 10263 | 59 |
| 2  | 8.760 2242 | 8.762 4093  | 8.764 5834  | 8.766 7176  | 8.768 8917  | 8.770 10219 | 58 |
| 3  | 8.760 2607 | 8.762 4456  | 8.764 6195  | 8.766 7537  | 8.768 9278  | 8.770 10175 | 57 |
| 4  | 8.760 2972 | 8.762 4819  | 8.764 6557  | 8.766 7898  | 8.768 9639  | 8.770 10131 | 56 |
| 5  | 8.760 3337 | 8.762 5182  | 8.764 6918  | 8.766 8259  | 8.768 9999  | 8.770 10087 | 55 |
| 6  | 8.760 3702 | 8.762 5546  | 8.764 7279  | 8.766 8620  | 8.768 10360 | 8.770 10043 | 54 |
| 7  | 8.760 4067 | 8.762 5909  | 8.764 7641  | 8.766 8981  | 8.768 10721 | 8.770 10000 | 53 |
| 8  | 8.760 4432 | 8.762 6272  | 8.764 8002  | 8.766 9342  | 8.768 11082 | 8.770 9956  | 52 |
| 9  | 8.760 4797 | 8.762 6635  | 8.764 8363  | 8.766 9703  | 8.768 11443 | 8.770 9912  | 51 |
| 10 | 8.760 5162 | 8.762 6998  | 8.764 8724  | 8.766 10064 | 8.768 11804 | 8.770 9868  | 50 |
| 11 | 8.760 5527 | 8.762 7361  | 8.764 9085  | 8.766 10425 | 8.768 12165 | 8.770 9824  | 49 |
| 12 | 8.760 5891 | 8.762 7724  | 8.764 9447  | 8.766 10786 | 8.768 12526 | 8.770 9780  | 48 |
| 13 | 8.760 6256 | 8.762 8087  | 8.764 9808  | 8.766 11147 | 8.768 12887 | 8.770 9736  | 47 |
| 14 | 8.760 6621 | 8.762 8450  | 8.764 10169 | 8.766 11508 | 8.768 13248 | 8.770 9692  | 46 |
| 15 | 8.760 6986 | 8.762 8813  | 8.764 10530 | 8.766 11869 | 8.768 13609 | 8.770 9648  | 45 |
| 16 | 8.760 7350 | 8.762 9176  | 8.764 10891 | 8.766 12230 | 8.768 13970 | 8.770 9604  | 44 |
| 17 | 8.760 7715 | 8.762 9539  | 8.764 11252 | 8.766 12591 | 8.768 14331 | 8.770 9560  | 43 |
| 18 | 8.760 8080 | 8.762 9902  | 8.764 11613 | 8.766 12952 | 8.768 14692 | 8.770 9516  | 42 |
| 19 | 8.760 8444 | 8.762 10265 | 8.764 11974 | 8.766 13313 | 8.768 15053 | 8.770 9472  | 41 |
| 20 | 8.760 8809 | 8.762 10627 | 8.764 12335 | 8.766 13674 | 8.768 15414 | 8.770 9428  | 40 |
| 21 | 8.760 9173 | 8.762 10989 | 8.764 12696 | 8.766 14035 | 8.768 15775 | 8.770 9384  | 39 |
| 22 | 8.760 9538 | 8.762 11352 | 8.764 13057 | 8.766 14396 | 8.768 16136 | 8.770 9340  | 38 |
| 23 | 8.760 9902 | 8.762 11715 | 8.764 13418 | 8.766 14757 | 8.768 16497 | 8.770 9296  | 37 |
| 24 | 8.761 0267 | 8.762 12077 | 8.764 13779 | 8.766 15118 | 8.768 16858 | 8.770 9252  | 36 |
| 25 | 8.761 0631 | 8.762 12440 | 8.764 14140 | 8.766 15479 | 8.768 17219 | 8.770 9208  | 35 |
| 26 | 8.761 0996 | 8.762 12802 | 8.764 14501 | 8.766 15840 | 8.768 17580 | 8.770 9164  | 34 |
| 27 | 8.761 1360 | 8.762 13165 | 8.764 14862 | 8.766 16201 | 8.768 17941 | 8.770 9120  | 33 |
| 28 | 8.761 1724 | 8.762 13527 | 8.764 15223 | 8.766 16562 | 8.768 18302 | 8.770 9076  | 32 |
| 29 | 8.761 2088 | 8.762 13890 | 8.764 15584 | 8.766 16923 | 8.768 18663 | 8.770 9032  | 31 |
| 30 | 8.761 2453 | 8.762 14252 | 8.764 15945 | 8.766 17284 | 8.768 19024 | 8.770 8988  | 30 |
| 31 | 8.761 2817 | 8.762 14615 | 8.764 16306 | 8.766 17645 | 8.768 19385 | 8.770 8944  | 29 |
| 32 | 8.761 3181 | 8.762 14977 | 8.764 16667 | 8.766 18006 | 8.768 19746 | 8.770 8900  | 28 |
| 33 | 8.761 3545 | 8.762 15339 | 8.764 17028 | 8.766 18367 | 8.768 20107 | 8.770 8856  | 27 |
| 34 | 8.761 3909 | 8.762 15702 | 8.764 17389 | 8.766 18728 | 8.768 20468 | 8.770 8812  | 26 |
| 35 | 8.761 4274 | 8.762 16064 | 8.764 17750 | 8.766 19089 | 8.768 20829 | 8.770 8768  | 25 |
| 36 | 8.761 4638 | 8.762 16426 | 8.764 18111 | 8.766 19450 | 8.768 21190 | 8.770 8724  | 24 |
| 37 | 8.761 5002 | 8.762 16788 | 8.764 18472 | 8.766 19811 | 8.768 21551 | 8.770 8680  | 23 |
| 38 | 8.761 5366 | 8.762 17150 | 8.764 18833 | 8.766 20172 | 8.768 21912 | 8.770 8636  | 22 |
| 39 | 8.761 5730 | 8.762 17512 | 8.764 19194 | 8.766 20533 | 8.768 22273 | 8.770 8592  | 21 |
| 40 | 8.761 6094 | 8.762 17874 | 8.764 19555 | 8.766 20894 | 8.768 22634 | 8.770 8548  | 20 |
| 41 | 8.761 6458 | 8.762 18236 | 8.764 19916 | 8.766 21255 | 8.768 22995 | 8.770 8504  | 19 |
| 42 | 8.761 6822 | 8.762 18598 | 8.764 20277 | 8.766 21616 | 8.768 23356 | 8.770 8460  | 18 |
| 43 | 8.761 7186 | 8.762 18960 | 8.764 20638 | 8.766 21977 | 8.768 23717 | 8.770 8416  | 17 |
| 44 | 8.761 7549 | 8.762 19322 | 8.764 21000 | 8.766 22338 | 8.768 24078 | 8.770 8372  | 16 |
| 45 | 8.761 7913 | 8.762 19684 | 8.764 21361 | 8.766 22699 | 8.768 24439 | 8.770 8328  | 15 |
| 46 | 8.761 8277 | 8.762 20046 | 8.764 21722 | 8.766 23060 | 8.768 24800 | 8.770 8284  | 14 |
| 47 | 8.761 8641 | 8.762 20408 | 8.764 22083 | 8.766 23421 | 8.768 25161 | 8.770 8240  | 13 |
| 48 | 8.761 9004 | 8.762 20770 | 8.764 22444 | 8.766 23782 | 8.768 25522 | 8.770 8196  | 12 |
| 49 | 8.761 9368 | 8.762 21132 | 8.764 22805 | 8.766 24143 | 8.768 25883 | 8.770 8152  | 11 |
| 50 | 8.761 9731 | 8.762 21494 | 8.764 23166 | 8.766 24504 | 8.768 26244 | 8.770 8108  | 10 |
| 51 | 8.762 0095 | 8.762 21856 | 8.764 23527 | 8.766 24865 | 8.768 26605 | 8.770 8064  | 9  |
| 52 | 8.762 0459 | 8.762 22218 | 8.764 23888 | 8.766 25226 | 8.768 26966 | 8.770 8020  | 8  |
| 53 | 8.762 0822 | 8.762 22580 | 8.764 24249 | 8.766 25587 | 8.768 27327 | 8.770 7976  | 7  |
| 54 | 8.762 1186 | 8.762 22942 | 8.764 24610 | 8.766 25948 | 8.768 27688 | 8.770 7932  | 6  |
| 55 | 8.762 1549 | 8.762 23304 | 8.764 24971 | 8.766 26309 | 8.768 28049 | 8.770 7888  | 5  |
| 56 | 8.762 1913 | 8.762 23666 | 8.764 25332 | 8.766 26670 | 8.768 28410 | 8.770 7844  | 4  |
| 57 | 8.762 2276 | 8.762 24028 | 8.764 25693 | 8.766 27031 | 8.768 28771 | 8.770 7800  | 3  |
| 58 | 8.762 2640 | 8.762 24390 | 8.764 26054 | 8.766 27392 | 8.768 29132 | 8.770 7756  | 2  |
| 59 | 8.762 3003 | 8.762 24752 | 8.764 26415 | 8.766 27753 | 8.768 29493 | 8.770 7712  | 1  |
| 60 | 8.762 3366 | 8.762 25114 | 8.764 26776 | 8.766 28114 | 8.768 29854 | 8.770 7668  | 0  |
| "  | 41'        | 40'         | 39'         | 38'         | 37'         | 36'         | "  |



| "  | 18'        | 19'        | 20'        | 21'        | 22'        | 23'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.760 8719 | 8.763 0647 | 8.765 2465 | 8.767 4175 | 8.769 5777 | 8.771 7274 | 60 |
| 1  | 8.760 9085 | 8.763 1011 | 8.765 2827 | 8.767 4536 | 8.769 6136 | 8.771 7631 | 59 |
| 2  | 8.760 9452 | 8.763 1376 | 8.765 3190 | 8.767 4896 | 8.769 6495 | 8.771 7988 | 58 |
| 3  | 8.760 9818 | 8.763 1740 | 8.765 3553 | 8.767 5257 | 8.769 6854 | 8.771 8346 | 57 |
| 4  | 8.761 0184 | 8.763 2105 | 8.765 3915 | 8.767 5618 | 8.769 7214 | 8.771 8703 | 56 |
| 5  | 8.761 0551 | 8.763 2469 | 8.765 4278 | 8.767 5979 | 8.769 7573 | 8.771 9060 | 55 |
| 6  | 8.761 0917 | 8.763 2833 | 8.765 4641 | 8.767 6340 | 8.769 7932 | 8.771 9417 | 54 |
| 7  | 8.761 1283 | 8.763 3198 | 8.765 5003 | 8.767 6700 | 8.769 8291 | 8.771 9775 | 53 |
| 8  | 8.761 1649 | 8.763 3562 | 8.765 5366 | 8.767 7061 | 8.769 8649 | 8.772 0132 | 52 |
| 9  | 8.761 2015 | 8.763 3926 | 8.765 5728 | 8.767 7422 | 8.769 9008 | 8.772 0489 | 51 |
| 10 | 8.761 2381 | 8.763 4291 | 8.765 6091 | 8.767 7782 | 8.769 9367 | 8.772 0846 | 50 |
| 11 | 8.761 2747 | 8.763 4655 | 8.765 6453 | 8.767 8143 | 8.769 9726 | 8.772 1203 | 49 |
| 12 | 8.761 3113 | 8.763 5019 | 8.765 6815 | 8.767 8504 | 8.770 0085 | 8.772 1560 | 48 |
| 13 | 8.761 3479 | 8.763 5383 | 8.765 7178 | 8.767 8864 | 8.770 0444 | 8.772 1917 | 47 |
| 14 | 8.761 3845 | 8.763 5747 | 8.765 7540 | 8.767 9225 | 8.770 0802 | 8.772 2274 | 46 |
| 15 | 8.761 4211 | 8.763 6111 | 8.765 7902 | 8.767 9585 | 8.770 1161 | 8.772 2631 | 45 |
| 16 | 8.761 4577 | 8.763 6475 | 8.765 8265 | 8.767 9946 | 8.770 1520 | 8.772 2988 | 44 |
| 17 | 8.761 4943 | 8.763 6839 | 8.765 8627 | 8.768 0306 | 8.770 1879 | 8.772 3345 | 43 |
| 18 | 8.761 5309 | 8.763 7204 | 8.765 8989 | 8.768 0667 | 8.770 2237 | 8.772 3702 | 42 |
| 19 | 8.761 5675 | 8.763 7567 | 8.765 9351 | 8.768 1027 | 8.770 2596 | 8.772 4059 | 41 |
| 20 | 8.761 6040 | 8.763 7931 | 8.765 9713 | 8.768 1387 | 8.770 2954 | 8.772 4416 | 40 |
| 21 | 8.761 6406 | 8.763 8295 | 8.766 0075 | 8.768 1748 | 8.770 3313 | 8.772 4772 | 39 |
| 22 | 8.761 6772 | 8.763 8659 | 8.766 0438 | 8.768 2108 | 8.770 3671 | 8.772 5129 | 38 |
| 23 | 8.761 7138 | 8.763 9023 | 8.766 0800 | 8.768 2468 | 8.770 4030 | 8.772 5486 | 37 |
| 24 | 8.761 7503 | 8.763 9387 | 8.766 1162 | 8.768 2828 | 8.770 4388 | 8.772 5843 | 36 |
| 25 | 8.761 7869 | 8.763 9751 | 8.766 1524 | 8.768 3189 | 8.770 4747 | 8.772 6199 | 35 |
| 26 | 8.761 8235 | 8.764 0115 | 8.766 1886 | 8.768 3549 | 8.770 5105 | 8.772 6556 | 34 |
| 27 | 8.761 8600 | 8.764 0478 | 8.766 2248 | 8.768 3909 | 8.770 5464 | 8.772 6913 | 33 |
| 28 | 8.761 8966 | 8.764 0842 | 8.766 2609 | 8.768 4269 | 8.770 5822 | 8.772 7269 | 32 |
| 29 | 8.761 9331 | 8.764 1206 | 8.766 2971 | 8.768 4629 | 8.770 6180 | 8.772 7626 | 31 |
| 30 | 8.761 9697 | 8.764 1569 | 8.766 3333 | 8.768 4989 | 8.770 6539 | 8.772 7982 | 30 |
| 31 | 8.762 0062 | 8.764 1933 | 8.766 3695 | 8.768 5349 | 8.770 6897 | 8.772 8339 | 29 |
| 32 | 8.762 0427 | 8.764 2297 | 8.766 4057 | 8.768 5709 | 8.770 7255 | 8.772 8695 | 28 |
| 33 | 8.762 0793 | 8.764 2660 | 8.766 4419 | 8.768 6069 | 8.770 7613 | 8.772 9052 | 27 |
| 34 | 8.762 1158 | 8.764 3024 | 8.766 4780 | 8.768 6429 | 8.770 7971 | 8.772 9408 | 26 |
| 35 | 8.762 1523 | 8.764 3387 | 8.766 5142 | 8.768 6789 | 8.770 8330 | 8.772 9764 | 25 |
| 36 | 8.762 1889 | 8.764 3751 | 8.766 5504 | 8.768 7149 | 8.770 8688 | 8.773 0121 | 24 |
| 37 | 8.762 2254 | 8.764 4114 | 8.766 5865 | 8.768 7509 | 8.770 9046 | 8.773 0477 | 23 |
| 38 | 8.762 2619 | 8.764 4477 | 8.766 6227 | 8.768 7869 | 8.770 9404 | 8.773 0833 | 22 |
| 39 | 8.762 2984 | 8.764 4841 | 8.766 6588 | 8.768 8228 | 8.770 9762 | 8.773 1190 | 21 |
| 40 | 8.762 3350 | 8.764 5204 | 8.766 6950 | 8.768 8588 | 8.771 0120 | 8.773 1546 | 20 |
| 41 | 8.762 3715 | 8.764 5567 | 8.766 7311 | 8.768 8948 | 8.771 0478 | 8.773 1902 | 19 |
| 42 | 8.762 4080 | 8.764 5931 | 8.766 7673 | 8.768 9308 | 8.771 0836 | 8.773 2258 | 18 |
| 43 | 8.762 4445 | 8.764 6294 | 8.766 8034 | 8.768 9667 | 8.771 1194 | 8.773 2615 | 17 |
| 44 | 8.762 4810 | 8.764 6657 | 8.766 8396 | 8.769 0027 | 8.771 1551 | 8.773 2971 | 16 |
| 45 | 8.762 5175 | 8.764 7020 | 8.766 8757 | 8.769 0387 | 8.771 1909 | 8.773 3327 | 15 |
| 46 | 8.762 5540 | 8.764 7384 | 8.766 9119 | 8.769 0746 | 8.771 2267 | 8.773 3683 | 14 |
| 47 | 8.762 5905 | 8.764 7747 | 8.766 9480 | 8.769 1106 | 8.771 2625 | 8.773 4039 | 13 |
| 48 | 8.762 6270 | 8.764 8110 | 8.766 9841 | 8.769 1465 | 8.771 2983 | 8.773 4395 | 12 |
| 49 | 8.762 6635 | 8.764 8473 | 8.767 0203 | 8.769 1825 | 8.771 3340 | 8.773 4751 | 11 |
| 50 | 8.762 7000 | 8.764 8836 | 8.767 0564 | 8.769 2184 | 8.771 3698 | 8.773 5107 | 10 |
| 51 | 8.762 7364 | 8.764 9199 | 8.767 0925 | 8.769 2544 | 8.771 4056 | 8.773 5463 | 9  |
| 52 | 8.762 7729 | 8.764 9562 | 8.767 1286 | 8.769 2903 | 8.771 4413 | 8.773 5819 | 8  |
| 53 | 8.762 8094 | 8.764 9925 | 8.767 1647 | 8.769 3262 | 8.771 4771 | 8.773 6174 | 7  |
| 54 | 8.762 8459 | 8.765 0288 | 8.767 2008 | 8.769 3622 | 8.771 5129 | 8.773 6530 | 6  |
| 55 | 8.762 8824 | 8.765 0651 | 8.767 2370 | 8.769 3981 | 8.771 5486 | 8.773 6886 | 5  |
| 56 | 8.762 9188 | 8.765 1014 | 8.767 2731 | 8.769 4340 | 8.771 5844 | 8.773 7242 | 4  |
| 57 | 8.762 9553 | 8.765 1376 | 8.767 3092 | 8.769 4700 | 8.771 6201 | 8.773 7598 | 3  |
| 58 | 8.762 9917 | 8.765 1739 | 8.767 3453 | 8.769 5059 | 8.771 6559 | 8.773 7953 | 2  |
| 59 | 8.763 0282 | 8.765 2102 | 8.767 3814 | 8.769 5418 | 8.771 6916 | 8.773 8309 | 1  |
| 60 | 8.763 0647 | 8.765 2465 | 8.767 4175 | 8.769 5777 | 8.771 7274 | 8.773 8665 | 0  |
| "  | 41'        | 40'        | 39'        | 38'        | 37'        | 36'        | "  |



| "  | 24'        | 25'        | 26'        | 27'        | 28'        | 29'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.773 1014 | 8.775 2226 | 8.777 3334 | 8.779 4340 | 8.781 5244 | 8.783 6048 | 60 |
| 1  | 8.773 1368 | 8.775 2578 | 8.777 3685 | 8.779 4689 | 8.781 5592 | 8.783 6394 | 59 |
| 2  | 8.773 1722 | 8.775 2931 | 8.777 4036 | 8.779 5038 | 8.781 5939 | 8.783 6740 | 58 |
| 3  | 8.773 2077 | 8.775 3283 | 8.777 4387 | 8.779 5388 | 8.781 6287 | 8.783 7086 | 57 |
| 4  | 8.773 2431 | 8.775 3636 | 8.777 4738 | 8.779 5737 | 8.781 6634 | 8.783 7432 | 56 |
| 5  | 8.773 2785 | 8.775 3989 | 8.777 5088 | 8.779 6086 | 8.781 6982 | 8.783 7778 | 55 |
| 6  | 8.773 3140 | 8.775 4341 | 8.777 5439 | 8.779 6435 | 8.781 7329 | 8.783 8123 | 54 |
| 7  | 8.773 3494 | 8.775 4694 | 8.777 5790 | 8.779 6784 | 8.781 7677 | 8.783 8469 | 53 |
| 8  | 8.773 3848 | 8.775 5046 | 8.777 6141 | 8.779 7133 | 8.781 8024 | 8.783 8815 | 52 |
| 9  | 8.773 4202 | 8.775 5398 | 8.777 6491 | 8.779 7482 | 8.781 8371 | 8.783 9160 | 51 |
| 10 | 8.773 4556 | 8.775 5751 | 8.777 6842 | 8.779 7831 | 8.781 8719 | 8.783 9506 | 50 |
| 11 | 8.773 4910 | 8.775 6103 | 8.777 7193 | 8.779 8180 | 8.781 9066 | 8.783 9852 | 49 |
| 12 | 8.773 5264 | 8.775 6455 | 8.777 7543 | 8.779 8529 | 8.781 9413 | 8.784 0197 | 48 |
| 13 | 8.773 5618 | 8.775 6808 | 8.777 7894 | 8.779 8878 | 8.781 9760 | 8.784 0543 | 47 |
| 14 | 8.773 5972 | 8.775 7160 | 8.777 8245 | 8.779 9227 | 8.782 0108 | 8.784 0888 | 46 |
| 15 | 8.773 6326 | 8.775 7512 | 8.777 8595 | 8.779 9576 | 8.782 0455 | 8.784 1234 | 45 |
| 16 | 8.773 6680 | 8.775 7865 | 8.777 8946 | 8.779 9924 | 8.782 0802 | 8.784 1579 | 44 |
| 17 | 8.773 7034 | 8.775 8217 | 8.777 9296 | 8.780 0273 | 8.782 1149 | 8.784 1925 | 43 |
| 18 | 8.773 7388 | 8.775 8569 | 8.777 9646 | 8.780 0622 | 8.782 1496 | 8.784 2270 | 42 |
| 19 | 8.773 7742 | 8.775 8921 | 8.777 9997 | 8.780 0971 | 8.782 1843 | 8.784 2615 | 41 |
| 20 | 8.773 8096 | 8.775 9273 | 8.778 0347 | 8.780 1319 | 8.782 2190 | 8.784 2961 | 40 |
| 21 | 8.773 8450 | 8.775 9625 | 8.778 0698 | 8.780 1668 | 8.782 2537 | 8.784 3306 | 39 |
| 22 | 8.773 8803 | 8.775 9977 | 8.778 1048 | 8.780 2017 | 8.782 2884 | 8.784 3651 | 38 |
| 23 | 8.773 9157 | 8.776 0329 | 8.778 1398 | 8.780 2365 | 8.782 3231 | 8.784 3997 | 37 |
| 24 | 8.773 9511 | 8.776 0681 | 8.778 1749 | 8.780 2714 | 8.782 3578 | 8.784 4342 | 36 |
| 25 | 8.773 9865 | 8.776 1033 | 8.778 2099 | 8.780 3062 | 8.782 3925 | 8.784 4687 | 35 |
| 26 | 8.774 0218 | 8.776 1385 | 8.778 2449 | 8.780 3411 | 8.782 4272 | 8.784 5032 | 34 |
| 27 | 8.774 0572 | 8.776 1737 | 8.778 2799 | 8.780 3759 | 8.782 4619 | 8.784 5378 | 33 |
| 28 | 8.774 0926 | 8.776 2089 | 8.778 3149 | 8.780 4108 | 8.782 4965 | 8.784 5723 | 32 |
| 29 | 8.774 1279 | 8.776 2441 | 8.778 3500 | 8.780 4456 | 8.782 5312 | 8.784 6068 | 31 |
| 30 | 8.774 1633 | 8.776 2793 | 8.778 3850 | 8.780 4805 | 8.782 5659 | 8.784 6413 | 30 |
| 31 | 8.774 1986 | 8.776 3144 | 8.778 4200 | 8.780 5153 | 8.782 6006 | 8.784 6758 | 29 |
| 32 | 8.774 2340 | 8.776 3496 | 8.778 4550 | 8.780 5502 | 8.782 6352 | 8.784 7103 | 28 |
| 33 | 8.774 2693 | 8.776 3848 | 8.778 4900 | 8.780 5850 | 8.782 6699 | 8.784 7448 | 27 |
| 34 | 8.774 3047 | 8.776 4200 | 8.778 5250 | 8.780 6198 | 8.782 7046 | 8.784 7793 | 26 |
| 35 | 8.774 3400 | 8.776 4551 | 8.778 5600 | 8.780 6546 | 8.782 7392 | 8.784 8138 | 25 |
| 36 | 8.774 3753 | 8.776 4903 | 8.778 5950 | 8.780 6895 | 8.782 7739 | 8.784 8483 | 24 |
| 37 | 8.774 4107 | 8.776 5255 | 8.778 6300 | 8.780 7243 | 8.782 8085 | 8.784 8828 | 23 |
| 38 | 8.774 4460 | 8.776 5606 | 8.778 6650 | 8.780 7591 | 8.782 8432 | 8.784 9173 | 22 |
| 39 | 8.774 4813 | 8.776 5958 | 8.778 6999 | 8.780 7939 | 8.782 8778 | 8.784 9518 | 21 |
| 40 | 8.774 5166 | 8.776 6309 | 8.778 7349 | 8.780 8287 | 8.782 9125 | 8.784 9862 | 20 |
| 41 | 8.774 5520 | 8.776 6661 | 8.778 7699 | 8.780 8636 | 8.782 9471 | 8.785 0207 | 19 |
| 42 | 8.774 5873 | 8.776 7012 | 8.778 8049 | 8.780 8984 | 8.782 9818 | 8.785 0552 | 18 |
| 43 | 8.774 6226 | 8.776 7364 | 8.778 8399 | 8.780 9332 | 8.783 0164 | 8.785 0897 | 17 |
| 44 | 8.774 6579 | 8.776 7715 | 8.778 8748 | 8.780 9680 | 8.783 0510 | 8.785 1241 | 16 |
| 45 | 8.774 6932 | 8.776 8067 | 8.778 9098 | 8.781 0028 | 8.783 0857 | 8.785 1586 | 15 |
| 46 | 8.774 7285 | 8.776 8418 | 8.778 9448 | 8.781 0376 | 8.783 1203 | 8.785 1931 | 14 |
| 47 | 8.774 7638 | 8.776 8769 | 8.778 9797 | 8.781 0724 | 8.783 1549 | 8.785 2275 | 13 |
| 48 | 8.774 7992 | 8.776 9121 | 8.779 0147 | 8.781 1072 | 8.783 1896 | 8.785 2620 | 12 |
| 49 | 8.774 8345 | 8.776 9472 | 8.779 0496 | 8.781 1419 | 8.783 2242 | 8.785 2964 | 11 |
| 50 | 8.774 8697 | 8.776 9823 | 8.779 0846 | 8.781 1767 | 8.783 2588 | 8.785 3309 | 10 |
| 51 | 8.774 9050 | 8.777 0174 | 8.779 1196 | 8.781 2115 | 8.783 2934 | 8.785 3653 | 9  |
| 52 | 8.774 9403 | 8.777 0525 | 8.779 1545 | 8.781 2463 | 8.783 3280 | 8.785 3998 | 8  |
| 53 | 8.774 9756 | 8.777 0877 | 8.779 1894 | 8.781 2811 | 8.783 3626 | 8.785 4342 | 7  |
| 54 | 8.775 0109 | 8.777 1228 | 8.779 2244 | 8.781 3158 | 8.783 3972 | 8.785 4687 | 6  |
| 55 | 8.775 0462 | 8.777 1579 | 8.779 2593 | 8.781 3506 | 8.783 4319 | 8.785 5031 | 5  |
| 56 | 8.775 0815 | 8.777 1930 | 8.779 2943 | 8.781 3854 | 8.783 4665 | 8.785 5376 | 4  |
| 57 | 8.775 1167 | 8.777 2281 | 8.779 3292 | 8.781 4202 | 8.783 5011 | 8.785 5720 | 3  |
| 58 | 8.775 1520 | 8.777 2632 | 8.779 3641 | 8.781 4549 | 8.783 5357 | 8.785 6064 | 2  |
| 59 | 8.775 1873 | 8.777 2983 | 8.779 3991 | 8.781 4897 | 8.783 5702 | 8.785 6409 | 1  |
| 60 | 8.775 2226 | 8.777 3334 | 8.779 4340 | 8.781 5244 | 8.783 6048 | 8.785 6753 | 0  |
| "  | 35'        | 34'        | 33'        | 32'        | 31'        | 30'        | "  |



| "  | 24'        | 25'        | 26'        | 27'        | 28'        | 29'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.773 8665 | 8.775 9952 | 8.778 1136 | 8.780 2218 | 8.782 3199 | 8.784 4079 | 60 |
| 1  | 8.773 9020 | 8.776 0306 | 8.778 1488 | 8.780 2568 | 8.782 3517 | 8.784 4426 | 59 |
| 2  | 8.773 9376 | 8.776 0660 | 8.778 1840 | 8.780 2919 | 8.782 3866 | 8.784 4774 | 58 |
| 3  | 8.773 9732 | 8.776 1014 | 8.778 2192 | 8.780 3269 | 8.782 4215 | 8.784 5121 | 57 |
| 4  | 8.774 0087 | 8.776 1367 | 8.778 2545 | 8.780 3620 | 8.782 4564 | 8.784 5468 | 56 |
| 5  | 8.774 0443 | 8.776 1721 | 8.778 2897 | 8.780 3970 | 8.782 4913 | 8.784 5815 | 55 |
| 6  | 8.774 0798 | 8.776 2075 | 8.778 3249 | 8.780 4320 | 8.782 5261 | 8.784 6162 | 54 |
| 7  | 8.774 1154 | 8.776 2429 | 8.778 3601 | 8.780 4671 | 8.782 5610 | 8.784 6509 | 53 |
| 8  | 8.774 1509 | 8.776 2782 | 8.778 3953 | 8.780 5021 | 8.782 5958 | 8.784 6856 | 52 |
| 9  | 8.774 1864 | 8.776 3136 | 8.778 4305 | 8.780 5371 | 8.782 6307 | 8.784 7203 | 51 |
| 10 | 8.774 2220 | 8.776 3490 | 8.778 4657 | 8.780 5722 | 8.782 6656 | 8.784 7550 | 50 |
| 11 | 8.774 2575 | 8.776 3843 | 8.778 5009 | 8.780 6072 | 8.782 7004 | 8.784 7897 | 49 |
| 12 | 8.774 2930 | 8.776 4197 | 8.778 5360 | 8.780 6422 | 8.782 7353 | 8.784 8244 | 48 |
| 13 | 8.774 3286 | 8.776 4550 | 8.778 5712 | 8.780 6772 | 8.782 7701 | 8.784 8590 | 47 |
| 14 | 8.774 3641 | 8.776 4904 | 8.778 6064 | 8.780 7122 | 8.782 8050 | 8.784 8937 | 46 |
| 15 | 8.774 3996 | 8.776 5258 | 8.778 6416 | 8.780 7472 | 8.782 8428 | 8.784 9284 | 45 |
| 16 | 8.774 4351 | 8.776 5611 | 8.778 6768 | 8.780 7823 | 8.782 8777 | 8.784 9631 | 44 |
| 17 | 8.774 4707 | 8.776 5964 | 8.778 7119 | 8.780 8173 | 8.782 9125 | 8.784 9977 | 43 |
| 18 | 8.774 5062 | 8.776 6318 | 8.778 7471 | 8.780 8523 | 8.782 9473 | 8.785 0324 | 42 |
| 19 | 8.774 5417 | 8.776 6671 | 8.778 7823 | 8.780 8873 | 8.782 9822 | 8.785 0671 | 41 |
| 20 | 8.774 5772 | 8.776 7025 | 8.778 8175 | 8.780 9223 | 8.783 0170 | 8.785 1017 | 40 |
| 21 | 8.774 6127 | 8.776 7378 | 8.778 8526 | 8.780 9573 | 8.783 0518 | 8.785 1364 | 39 |
| 22 | 8.774 6482 | 8.776 7731 | 8.778 8878 | 8.780 9922 | 8.783 0866 | 8.785 1711 | 38 |
| 23 | 8.774 6837 | 8.776 8085 | 8.778 9229 | 8.781 0272 | 8.783 1215 | 8.785 2057 | 37 |
| 24 | 8.774 7192 | 8.776 8438 | 8.778 9581 | 8.781 0622 | 8.783 1563 | 8.785 2404 | 36 |
| 25 | 8.774 7547 | 8.776 8791 | 8.778 9932 | 8.781 0972 | 8.783 1911 | 8.785 2750 | 35 |
| 26 | 8.774 7902 | 8.776 9144 | 8.779 0284 | 8.781 1322 | 8.783 2259 | 8.785 3097 | 34 |
| 27 | 8.774 8257 | 8.776 9497 | 8.779 0635 | 8.781 1672 | 8.783 2607 | 8.785 3443 | 33 |
| 28 | 8.774 8612 | 8.776 9851 | 8.779 0987 | 8.781 2021 | 8.783 2955 | 8.785 3790 | 32 |
| 29 | 8.774 8966 | 8.777 0204 | 8.779 1338 | 8.781 2371 | 8.783 3303 | 8.785 4136 | 31 |
| 30 | 8.774 9321 | 8.777 0557 | 8.779 1690 | 8.781 2721 | 8.783 3651 | 8.785 4482 | 30 |
| 31 | 8.774 9676 | 8.777 0910 | 8.779 2041 | 8.781 3070 | 8.783 3999 | 8.785 4829 | 29 |
| 32 | 8.775 0031 | 8.777 1263 | 8.779 2392 | 8.781 3420 | 8.783 4347 | 8.785 5175 | 28 |
| 33 | 8.775 0385 | 8.777 1616 | 8.779 2744 | 8.781 3770 | 8.783 4695 | 8.785 5521 | 27 |
| 34 | 8.775 0740 | 8.777 1969 | 8.779 3095 | 8.781 4119 | 8.783 5043 | 8.785 5868 | 26 |
| 35 | 8.775 1095 | 8.777 2322 | 8.779 3446 | 8.781 4469 | 8.783 5391 | 8.785 6214 | 25 |
| 36 | 8.775 1449 | 8.777 2675 | 8.779 3797 | 8.781 4818 | 8.783 5739 | 8.785 6560 | 24 |
| 37 | 8.775 1804 | 8.777 3027 | 8.779 4148 | 8.781 5168 | 8.783 6087 | 8.785 6906 | 23 |
| 38 | 8.775 2159 | 8.777 3380 | 8.779 4500 | 8.781 5517 | 8.783 6435 | 8.785 7252 | 22 |
| 39 | 8.775 2513 | 8.777 3733 | 8.779 4851 | 8.781 5867 | 8.783 6782 | 8.785 7599 | 21 |
| 40 | 8.775 2868 | 8.777 4086 | 8.779 5202 | 8.781 6216 | 8.783 7130 | 8.785 7945 | 20 |
| 41 | 8.775 3222 | 8.777 4439 | 8.779 5553 | 8.781 6566 | 8.783 7478 | 8.785 8292 | 19 |
| 42 | 8.775 3577 | 8.777 4791 | 8.779 5904 | 8.781 6915 | 8.783 7826 | 8.785 8637 | 18 |
| 43 | 8.775 3931 | 8.777 5144 | 8.779 6255 | 8.781 7264 | 8.783 8173 | 8.785 8983 | 17 |
| 44 | 8.775 4285 | 8.777 5497 | 8.779 6606 | 8.781 7614 | 8.783 8521 | 8.785 9329 | 16 |
| 45 | 8.775 4640 | 8.777 5850 | 8.779 6957 | 8.781 7963 | 8.783 8868 | 8.785 9675 | 15 |
| 46 | 8.775 4994 | 8.777 6202 | 8.779 7308 | 8.781 8312 | 8.783 9216 | 8.786 0021 | 14 |
| 47 | 8.775 5348 | 8.777 6555 | 8.779 7659 | 8.781 8661 | 8.783 9564 | 8.786 0367 | 13 |
| 48 | 8.775 5703 | 8.777 6907 | 8.779 8010 | 8.781 9011 | 8.783 9911 | 8.786 0712 | 12 |
| 49 | 8.775 6057 | 8.777 7260 | 8.779 8360 | 8.781 9360 | 8.784 0259 | 8.786 1058 | 11 |
| 50 | 8.775 6411 | 8.777 7612 | 8.779 8711 | 8.781 9709 | 8.784 0606 | 8.786 1404 | 10 |
| 51 | 8.775 6765 | 8.777 7965 | 8.779 9062 | 8.782 0058 | 8.784 0954 | 8.786 1750 | 9  |
| 52 | 8.775 7120 | 8.777 8317 | 8.779 9413 | 8.782 0407 | 8.784 1301 | 8.786 2096 | 8  |
| 53 | 8.775 7474 | 8.777 8670 | 8.779 9763 | 8.782 0756 | 8.784 1648 | 8.786 2441 | 7  |
| 54 | 8.775 7828 | 8.777 9022 | 8.780 0114 | 8.782 1105 | 8.784 1996 | 8.786 2787 | 6  |
| 55 | 8.775 8182 | 8.777 9374 | 8.780 0465 | 8.782 1454 | 8.784 2343 | 8.786 3133 | 5  |
| 56 | 8.775 8536 | 8.777 9727 | 8.780 0816 | 8.782 1803 | 8.784 2690 | 8.786 3478 | 4  |
| 57 | 8.775 8890 | 8.778 0079 | 8.780 1166 | 8.782 2152 | 8.784 3038 | 8.786 3824 | 3  |
| 58 | 8.775 9244 | 8.778 0431 | 8.780 1517 | 8.782 2501 | 8.784 3385 | 8.786 4170 | 2  |
| 59 | 8.775 9598 | 8.778 0784 | 8.780 1867 | 8.782 2850 | 8.784 3732 | 8.786 4515 | 1  |
| 60 | 8.775 9952 | 8.778 1136 | 8.780 2218 | 8.782 3199 | 8.784 4079 | 8.786 4861 | 0  |
| "  | 30'        | 34'        | 38'        | 32'        | 31'        | 30'        | "  |



| "  | 30'        | 31'        | 32'        | 33'        | 34'        | 35'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.785 6753 | 8.787 7359 | 8.789 7867 | 8.791 8278 | 8.793 8594 | 8.795 8814 | 60 |
| 1  | 8.785 7097 | 8.787 7701 | 8.789 8208 | 8.791 8618 | 8.793 8931 | 8.795 9150 | 59 |
| 2  | 8.785 7441 | 8.787 8044 | 8.789 8549 | 8.791 8957 | 8.793 9269 | 8.795 9487 | 58 |
| 3  | 8.785 7785 | 8.787 8386 | 8.789 8890 | 8.791 9296 | 8.793 9607 | 8.795 9823 | 57 |
| 4  | 8.785 8130 | 8.787 8729 | 8.789 9231 | 8.791 9635 | 8.793 9945 | 8.796 0159 | 56 |
| 5  | 8.785 8474 | 8.787 9071 | 8.789 9571 | 8.791 9975 | 8.794 0282 | 8.796 0495 | 55 |
| 6  | 8.785 8818 | 8.787 9414 | 8.789 9912 | 8.792 0314 | 8.794 0620 | 8.796 0831 | 54 |
| 7  | 8.785 9162 | 8.787 9756 | 8.790 0253 | 8.792 0653 | 8.794 0958 | 8.796 1167 | 53 |
| 8  | 8.785 9506 | 8.788 0099 | 8.790 0594 | 8.792 0992 | 8.794 1295 | 8.796 1503 | 52 |
| 9  | 8.785 9850 | 8.788 0441 | 8.790 0935 | 8.792 1332 | 8.794 1633 | 8.796 1839 | 51 |
| 10 | 8.786 0194 | 8.788 0783 | 8.790 1275 | 8.792 1671 | 8.794 1970 | 8.796 2175 | 50 |
| 11 | 8.786 0538 | 8.788 1126 | 8.790 1616 | 8.792 2010 | 8.794 2308 | 8.796 2511 | 49 |
| 12 | 8.786 0882 | 8.788 1468 | 8.790 1957 | 8.792 2349 | 8.794 2645 | 8.796 2847 | 48 |
| 13 | 8.786 1226 | 8.788 1810 | 8.790 2297 | 8.792 2688 | 8.794 2983 | 8.796 3183 | 47 |
| 14 | 8.786 1570 | 8.788 2153 | 8.790 2638 | 8.792 3027 | 8.794 3320 | 8.796 3519 | 46 |
| 15 | 8.786 1913 | 8.788 2495 | 8.790 2979 | 8.792 3366 | 8.794 3658 | 8.796 3855 | 45 |
| 16 | 8.786 2257 | 8.788 2837 | 8.790 3319 | 8.792 3705 | 8.794 3995 | 8.796 4190 | 44 |
| 17 | 8.786 2601 | 8.788 3179 | 8.790 3660 | 8.792 4044 | 8.794 4332 | 8.796 4526 | 43 |
| 18 | 8.786 2945 | 8.788 3521 | 8.790 4000 | 8.792 4383 | 8.794 4670 | 8.796 4862 | 42 |
| 19 | 8.786 3289 | 8.788 3863 | 8.790 4341 | 8.792 4722 | 8.794 5007 | 8.796 5198 | 41 |
| 20 | 8.786 3632 | 8.788 4205 | 8.790 4681 | 8.792 5061 | 8.794 5344 | 8.796 5534 | 40 |
| 21 | 8.786 3976 | 8.788 4548 | 8.790 5022 | 8.792 5399 | 8.794 5682 | 8.796 5869 | 39 |
| 22 | 8.786 4320 | 8.788 4890 | 8.790 5362 | 8.792 5738 | 8.794 6019 | 8.796 6205 | 38 |
| 23 | 8.786 4663 | 8.788 5232 | 8.790 5702 | 8.792 6077 | 8.794 6356 | 8.796 6540 | 37 |
| 24 | 8.786 5007 | 8.788 5574 | 8.790 6043 | 8.792 6416 | 8.794 6693 | 8.796 6876 | 36 |
| 25 | 8.786 5350 | 8.788 5915 | 8.790 6383 | 8.792 6755 | 8.794 7030 | 8.796 7212 | 35 |
| 26 | 8.786 5694 | 8.788 6257 | 8.790 6724 | 8.792 7093 | 8.794 7368 | 8.796 7547 | 34 |
| 27 | 8.786 6038 | 8.788 6599 | 8.790 7064 | 8.792 7432 | 8.794 7705 | 8.796 7883 | 33 |
| 28 | 8.786 6381 | 8.788 6941 | 8.790 7404 | 8.792 7771 | 8.794 8042 | 8.796 8218 | 32 |
| 29 | 8.786 6725 | 8.788 7283 | 8.790 7744 | 8.792 8109 | 8.794 8379 | 8.796 8554 | 31 |
| 30 | 8.786 7068 | 8.788 7625 | 8.790 8084 | 8.792 8448 | 8.794 8716 | 8.796 8889 | 30 |
| 31 | 8.786 7411 | 8.788 7967 | 8.790 8425 | 8.792 8786 | 8.794 9053 | 8.796 9225 | 29 |
| 32 | 8.786 7755 | 8.788 8308 | 8.790 8765 | 8.792 9125 | 8.794 9390 | 8.796 9560 | 28 |
| 33 | 8.786 8098 | 8.788 8650 | 8.790 9105 | 8.792 9463 | 8.794 9727 | 8.796 9895 | 27 |
| 34 | 8.786 8441 | 8.788 8992 | 8.790 9445 | 8.792 9802 | 8.795 0064 | 8.797 0231 | 26 |
| 35 | 8.786 8785 | 8.788 9333 | 8.790 9785 | 8.793 0140 | 8.795 0400 | 8.797 0566 | 25 |
| 36 | 8.786 9128 | 8.788 9675 | 8.791 0125 | 8.793 0479 | 8.795 0737 | 8.797 0901 | 24 |
| 37 | 8.786 9471 | 8.789 0017 | 8.791 0465 | 8.793 0817 | 8.795 1074 | 8.797 1237 | 23 |
| 38 | 8.786 9815 | 8.789 0358 | 8.791 0805 | 8.793 1156 | 8.795 1411 | 8.797 1572 | 22 |
| 39 | 8.787 0158 | 8.789 0700 | 8.791 1145 | 8.793 1494 | 8.795 1748 | 8.797 1907 | 21 |
| 40 | 8.787 0501 | 8.789 1041 | 8.791 1485 | 8.793 1832 | 8.795 2085 | 8.797 2242 | 20 |
| 41 | 8.787 0844 | 8.789 1383 | 8.791 1825 | 8.793 2171 | 8.795 2421 | 8.797 2577 | 19 |
| 42 | 8.787 1187 | 8.789 1725 | 8.791 2165 | 8.793 2509 | 8.795 2758 | 8.797 2913 | 18 |
| 43 | 8.787 1530 | 8.789 2066 | 8.791 2505 | 8.793 2847 | 8.795 3095 | 8.797 3248 | 17 |
| 44 | 8.787 1873 | 8.789 2407 | 8.791 2845 | 8.793 3186 | 8.795 3431 | 8.797 3583 | 16 |
| 45 | 8.787 2216 | 8.789 2749 | 8.791 3184 | 8.793 3524 | 8.795 3768 | 8.797 3918 | 15 |
| 46 | 8.787 2559 | 8.789 3090 | 8.791 3524 | 8.793 3862 | 8.795 4105 | 8.797 4253 | 14 |
| 47 | 8.787 2902 | 8.789 3432 | 8.791 3864 | 8.793 4200 | 8.795 4441 | 8.797 4588 | 13 |
| 48 | 8.787 3245 | 8.789 3773 | 8.791 4204 | 8.793 4538 | 8.795 4778 | 8.797 4923 | 12 |
| 49 | 8.787 3588 | 8.789 4114 | 8.791 4543 | 8.793 4876 | 8.795 5114 | 8.797 5258 | 11 |
| 50 | 8.787 3931 | 8.789 4455 | 8.791 4883 | 8.793 5214 | 8.795 5451 | 8.797 5593 | 10 |
| 51 | 8.787 4274 | 8.789 4797 | 8.791 5223 | 8.793 5552 | 8.795 5787 | 8.797 5928 | 9  |
| 52 | 8.787 4617 | 8.789 5138 | 8.791 5562 | 8.793 5890 | 8.795 6124 | 8.797 6263 | 8  |
| 53 | 8.787 4960 | 8.789 5479 | 8.791 5902 | 8.793 6228 | 8.795 6460 | 8.797 6597 | 7  |
| 54 | 8.787 5302 | 8.789 5820 | 8.791 6241 | 8.793 6566 | 8.795 6796 | 8.797 6932 | 6  |
| 55 | 8.787 5645 | 8.789 6161 | 8.791 6581 | 8.793 6904 | 8.795 7133 | 8.797 7267 | 5  |
| 56 | 8.787 5988 | 8.789 6503 | 8.791 6920 | 8.793 7242 | 8.795 7469 | 8.797 7602 | 4  |
| 57 | 8.787 6331 | 8.789 6844 | 8.791 7260 | 8.793 7580 | 8.795 7805 | 8.797 7937 | 3  |
| 58 | 8.787 6673 | 8.789 7185 | 8.791 7599 | 8.793 7918 | 8.795 8142 | 8.797 8271 | 2  |
| 59 | 8.787 7016 | 8.789 7526 | 8.791 7939 | 8.793 8256 | 8.795 8478 | 8.797 8606 | 1  |
| 60 | 8.787 7359 | 8.789 7867 | 8.791 8278 | 8.793 8594 | 8.795 8814 | 8.797 8941 | 0  |
| "  | 29'        | 28'        | 27'        | 26'        | 25'        | 24'        | "  |



| "  | 30'        | 31'        | 32'        | 33'        | 34'        | 35'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.786 4861 | 8.788 5544 | 8.790 6130 | 8.792 6620 | 8.794 7014 | 8.796 7313 | 60 |
| 1  | 8.786 5206 | 8.788 5888 | 8.790 6472 | 8.792 6960 | 8.794 7353 | 8.796 7651 | 59 |
| 2  | 8.786 5552 | 8.788 6232 | 8.790 6815 | 8.792 7301 | 8.794 7692 | 8.796 7988 | 58 |
| 3  | 8.786 5897 | 8.788 6576 | 8.790 7157 | 8.792 7642 | 8.794 8031 | 8.796 8326 | 57 |
| 4  | 8.786 6243 | 8.788 6919 | 8.790 7499 | 8.792 7982 | 8.794 8370 | 8.796 8663 | 56 |
| 5  | 8.786 6588 | 8.788 7263 | 8.790 7841 | 8.792 8323 | 8.794 8709 | 8.796 9001 | 55 |
| 6  | 8.786 6934 | 8.788 7607 | 8.790 8183 | 8.792 8663 | 8.794 9048 | 8.796 9338 | 54 |
| 7  | 8.786 7279 | 8.788 7951 | 8.790 8525 | 8.792 9004 | 8.794 9387 | 8.796 9675 | 53 |
| 8  | 8.786 7624 | 8.788 8293 | 8.790 8868 | 8.792 9344 | 8.794 9726 | 8.797 0013 | 52 |
| 9  | 8.786 7970 | 8.788 8638 | 8.790 9210 | 8.792 9685 | 8.795 0065 | 8.797 0350 | 51 |
| 10 | 8.786 8315 | 8.788 8982 | 8.790 9552 | 8.793 0025 | 8.795 0404 | 8.797 0687 | 50 |
| 11 | 8.786 8660 | 8.788 9325 | 8.790 9894 | 8.793 0366 | 8.795 0742 | 8.797 1025 | 49 |
| 12 | 8.786 9005 | 8.788 9669 | 8.791 0236 | 8.793 0706 | 8.795 1081 | 8.797 1362 | 48 |
| 13 | 8.786 9350 | 8.789 0013 | 8.791 0578 | 8.793 1046 | 8.795 1420 | 8.797 1699 | 47 |
| 14 | 8.786 9696 | 8.789 0356 | 8.791 0920 | 8.793 1387 | 8.795 1759 | 8.797 2036 | 46 |
| 15 | 8.787 0041 | 8.789 0698 | 8.791 1261 | 8.793 1727 | 8.795 2097 | 8.797 2373 | 45 |
| 16 | 8.787 0386 | 8.789 1043 | 8.791 1603 | 8.793 2067 | 8.795 2436 | 8.797 2711 | 44 |
| 17 | 8.787 0731 | 8.789 1387 | 8.791 1945 | 8.793 2408 | 8.795 2775 | 8.797 3048 | 43 |
| 18 | 8.787 1076 | 8.789 1730 | 8.791 2287 | 8.793 2748 | 8.795 3113 | 8.797 3385 | 42 |
| 19 | 8.787 1421 | 8.789 2073 | 8.791 2629 | 8.793 3088 | 8.795 3452 | 8.797 3722 | 41 |
| 20 | 8.787 1766 | 8.789 2417 | 8.791 2971 | 8.793 3428 | 8.795 3791 | 8.797 4059 | 40 |
| 21 | 8.787 2111 | 8.789 2760 | 8.791 3312 | 8.793 3768 | 8.795 4129 | 8.797 4396 | 39 |
| 22 | 8.787 2456 | 8.789 3104 | 8.791 3654 | 8.793 4109 | 8.795 4468 | 8.797 4733 | 38 |
| 23 | 8.787 2801 | 8.789 3447 | 8.791 3996 | 8.793 4449 | 8.795 4806 | 8.797 5070 | 37 |
| 24 | 8.787 3146 | 8.789 3790 | 8.791 4337 | 8.793 4789 | 8.795 5145 | 8.797 5407 | 36 |
| 25 | 8.787 3491 | 8.789 4133 | 8.791 4679 | 8.793 5129 | 8.795 5483 | 8.797 5744 | 35 |
| 26 | 8.787 3836 | 8.789 4477 | 8.791 5021 | 8.793 5469 | 8.795 5822 | 8.797 6081 | 34 |
| 27 | 8.787 4180 | 8.789 4820 | 8.791 5362 | 8.793 5809 | 8.795 6160 | 8.797 6417 | 33 |
| 28 | 8.787 4525 | 8.789 5163 | 8.791 5704 | 8.793 6149 | 8.795 6499 | 8.797 6754 | 32 |
| 29 | 8.787 4870 | 8.789 5506 | 8.791 6045 | 8.793 6489 | 8.795 6837 | 8.797 7091 | 31 |
| 30 | 8.787 5215 | 8.789 5849 | 8.791 6387 | 8.793 6829 | 8.795 7175 | 8.797 7428 | 30 |
| 31 | 8.787 5559 | 8.789 6192 | 8.791 6728 | 8.793 7168 | 8.795 7514 | 8.797 7765 | 29 |
| 32 | 8.787 5904 | 8.789 6535 | 8.791 7070 | 8.793 7508 | 8.795 7852 | 8.797 8101 | 28 |
| 33 | 8.787 6249 | 8.789 6878 | 8.791 7411 | 8.793 7848 | 8.795 8190 | 8.797 8438 | 27 |
| 34 | 8.787 6594 | 8.789 7221 | 8.791 7753 | 8.793 8188 | 8.795 8528 | 8.797 8775 | 26 |
| 35 | 8.787 6938 | 8.789 7564 | 8.791 8094 | 8.793 8528 | 8.795 8867 | 8.797 9111 | 25 |
| 36 | 8.787 7283 | 8.789 7907 | 8.791 8435 | 8.793 8867 | 8.795 9205 | 8.797 9448 | 24 |
| 37 | 8.787 7627 | 8.789 8250 | 8.791 8777 | 8.793 9207 | 8.795 9543 | 8.797 9785 | 23 |
| 38 | 8.787 7972 | 8.789 8593 | 8.791 9118 | 8.793 9547 | 8.795 9881 | 8.798 0121 | 22 |
| 39 | 8.787 8316 | 8.789 8936 | 8.791 9459 | 8.793 9887 | 8.796 0219 | 8.798 0458 | 21 |
| 40 | 8.787 8661 | 8.789 9279 | 8.791 9800 | 8.794 0226 | 8.796 0557 | 8.798 0794 | 20 |
| 41 | 8.787 9005 | 8.789 9622 | 8.792 0142 | 8.794 0566 | 8.796 0895 | 8.798 1131 | 19 |
| 42 | 8.787 9349 | 8.789 9964 | 8.792 0483 | 8.794 0905 | 8.796 1233 | 8.798 1467 | 18 |
| 43 | 8.787 9694 | 8.790 0307 | 8.792 0824 | 8.794 1245 | 8.796 1571 | 8.798 1804 | 17 |
| 44 | 8.788 0038 | 8.790 0650 | 8.792 1165 | 8.794 1585 | 8.796 1909 | 8.798 2140 | 16 |
| 45 | 8.788 0382 | 8.790 0993 | 8.792 1506 | 8.794 1924 | 8.796 2247 | 8.798 2476 | 15 |
| 46 | 8.788 0727 | 8.790 1335 | 8.792 1847 | 8.794 2264 | 8.796 2585 | 8.798 2813 | 14 |
| 47 | 8.788 1071 | 8.790 1678 | 8.792 2188 | 8.794 2603 | 8.796 2923 | 8.798 3149 | 13 |
| 48 | 8.788 1415 | 8.790 2021 | 8.792 2529 | 8.794 2943 | 8.796 3261 | 8.798 3485 | 12 |
| 49 | 8.788 1759 | 8.790 2363 | 8.792 2870 | 8.794 3282 | 8.796 3599 | 8.798 3822 | 11 |
| 50 | 8.788 2104 | 8.790 2706 | 8.792 3211 | 8.794 3621 | 8.796 3937 | 8.798 4158 | 10 |
| 51 | 8.788 2448 | 8.790 3048 | 8.792 3552 | 8.794 3961 | 8.796 4274 | 8.798 4494 | 9  |
| 52 | 8.788 2792 | 8.790 3391 | 8.792 3893 | 8.794 4300 | 8.796 4612 | 8.798 4830 | 8  |
| 53 | 8.788 3136 | 8.790 3733 | 8.792 4234 | 8.794 4639 | 8.796 4950 | 8.798 5166 | 7  |
| 54 | 8.788 3480 | 8.790 4076 | 8.792 4575 | 8.794 4979 | 8.796 5288 | 8.798 5503 | 6  |
| 55 | 8.788 3824 | 8.790 4418 | 8.792 4916 | 8.794 5318 | 8.796 5625 | 8.798 5839 | 5  |
| 56 | 8.788 4168 | 8.790 4761 | 8.792 5257 | 8.794 5657 | 8.796 5963 | 8.798 6175 | 4  |
| 57 | 8.788 4512 | 8.790 5103 | 8.792 5597 | 8.794 5996 | 8.796 6300 | 8.798 6511 | 3  |
| 58 | 8.788 4856 | 8.790 5445 | 8.792 5938 | 8.794 6335 | 8.796 6638 | 8.798 6847 | 2  |
| 59 | 8.788 5200 | 8.790 5788 | 8.792 6279 | 8.794 6675 | 8.796 6976 | 8.798 7183 | 1  |
| 60 | 8.788 5544 | 8.790 6130 | 8.792 6620 | 8.794 7014 | 8.796 7313 | 8.798 7519 | 0  |
| "  | 30'        | 31'        | 32'        | 33'        | 34'        | 35'        | "  |



| "  | 36'        | 37'        | 38'        | 39'        | 40'        | 41'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.797 8941 | 8.799 8974 | 8.801 8915 | 8.803 8764 | 8.805 8523 | 8.807 8192 | 60 |
| 1  | 8.797 9275 | 8.799 9307 | 8.801 9247 | 8.803 9095 | 8.805 8852 | 8.807 8519 | 59 |
| 2  | 8.797 9610 | 8.799 9640 | 8.801 9578 | 8.803 9425 | 8.805 9180 | 8.807 8846 | 58 |
| 3  | 8.797 9945 | 8.799 9973 | 8.801 9910 | 8.803 9755 | 8.805 9509 | 8.807 9173 | 57 |
| 4  | 8.798 0279 | 8.800 0306 | 8.802 0241 | 8.804 0085 | 8.805 9837 | 8.807 9500 | 56 |
| 5  | 8.798 0614 | 8.800 0639 | 8.802 0573 | 8.804 0414 | 8.806 0166 | 8.807 9827 | 55 |
| 6  | 8.798 0948 | 8.800 0972 | 8.802 0904 | 8.804 0744 | 8.806 0494 | 8.808 0154 | 54 |
| 7  | 8.798 1283 | 8.800 1305 | 8.802 1235 | 8.804 1074 | 8.806 0823 | 8.808 0481 | 53 |
| 8  | 8.798 1617 | 8.800 1638 | 8.802 1567 | 8.804 1404 | 8.806 1151 | 8.808 0808 | 52 |
| 9  | 8.798 1952 | 8.800 1971 | 8.802 1898 | 8.804 1734 | 8.806 1479 | 8.808 1135 | 51 |
| 10 | 8.798 2286 | 8.800 2304 | 8.802 2230 | 8.804 2064 | 8.806 1808 | 8.808 1462 | 50 |
| 11 | 8.798 2620 | 8.800 2637 | 8.802 2561 | 8.804 2394 | 8.806 2136 | 8.808 1788 | 49 |
| 12 | 8.798 2955 | 8.800 2970 | 8.802 2892 | 8.804 2723 | 8.806 2464 | 8.808 2115 | 48 |
| 13 | 8.798 3289 | 8.800 3302 | 8.802 3223 | 8.804 3053 | 8.806 2792 | 8.808 2442 | 47 |
| 14 | 8.798 3624 | 8.800 3635 | 8.802 3555 | 8.804 3383 | 8.806 3121 | 8.808 2769 | 46 |
| 15 | 8.798 3958 | 8.800 3968 | 8.802 3886 | 8.804 3713 | 8.806 3449 | 8.808 3095 | 45 |
| 16 | 8.798 4292 | 8.800 4301 | 8.802 4217 | 8.804 4042 | 8.806 3777 | 8.808 3422 | 44 |
| 17 | 8.798 4626 | 8.800 4633 | 8.802 4548 | 8.804 4372 | 8.806 4105 | 8.808 3749 | 43 |
| 18 | 8.798 4961 | 8.800 4966 | 8.802 4879 | 8.804 4702 | 8.806 4433 | 8.808 4075 | 42 |
| 19 | 8.798 5295 | 8.800 5299 | 8.802 5211 | 8.804 5031 | 8.806 4761 | 8.808 4402 | 41 |
| 20 | 8.798 5629 | 8.800 5637 | 8.802 5542 | 8.804 5361 | 8.806 5089 | 8.808 4729 | 40 |
| 21 | 8.798 5963 | 8.800 5964 | 8.802 5873 | 8.804 5690 | 8.806 5418 | 8.808 5055 | 39 |
| 22 | 8.798 6297 | 8.800 6296 | 8.802 6204 | 8.804 6020 | 8.806 5746 | 8.808 5382 | 38 |
| 23 | 8.798 6631 | 8.800 6629 | 8.802 6535 | 8.804 6349 | 8.806 6074 | 8.808 5708 | 37 |
| 24 | 8.798 6965 | 8.800 6961 | 8.802 6866 | 8.804 6679 | 8.806 6402 | 8.808 6035 | 36 |
| 25 | 8.798 7299 | 8.800 7294 | 8.802 7197 | 8.804 7008 | 8.806 6729 | 8.808 6361 | 35 |
| 26 | 8.798 7633 | 8.800 7626 | 8.802 7528 | 8.804 7338 | 8.806 7057 | 8.808 6688 | 34 |
| 27 | 8.798 7967 | 8.800 7959 | 8.802 7859 | 8.804 7667 | 8.806 7385 | 8.808 7014 | 33 |
| 28 | 8.798 8301 | 8.800 8291 | 8.802 8189 | 8.804 7996 | 8.806 7713 | 8.808 7340 | 32 |
| 29 | 8.798 8635 | 8.800 8624 | 8.802 8520 | 8.804 8326 | 8.806 8041 | 8.808 7667 | 31 |
| 30 | 8.798 8969 | 8.800 8956 | 8.802 8851 | 8.804 8655 | 8.806 8369 | 8.808 7993 | 30 |
| 31 | 8.798 9303 | 8.800 9288 | 8.802 9182 | 8.804 8984 | 8.806 8697 | 8.808 8319 | 29 |
| 32 | 8.798 9637 | 8.800 9621 | 8.802 9513 | 8.804 9314 | 8.806 9024 | 8.808 8646 | 28 |
| 33 | 8.798 9971 | 8.800 9953 | 8.802 9843 | 8.804 9643 | 8.806 9352 | 8.808 8972 | 27 |
| 34 | 8.799 0304 | 8.801 0285 | 8.803 0174 | 8.804 9972 | 8.806 9680 | 8.808 9298 | 26 |
| 35 | 8.799 0638 | 8.801 0617 | 8.803 0505 | 8.805 0301 | 8.807 0008 | 8.808 9624 | 25 |
| 36 | 8.799 0972 | 8.801 0950 | 8.803 0836 | 8.805 0631 | 8.807 0335 | 8.808 9951 | 24 |
| 37 | 8.799 1306 | 8.801 1282 | 8.803 1166 | 8.805 0960 | 8.807 0663 | 8.809 0277 | 23 |
| 38 | 8.799 1639 | 8.801 1614 | 8.803 1497 | 8.805 1289 | 8.807 0991 | 8.809 0603 | 22 |
| 39 | 8.799 1973 | 8.801 1946 | 8.803 1828 | 8.805 1618 | 8.807 1318 | 8.809 0929 | 21 |
| 40 | 8.799 2307 | 8.801 2278 | 8.803 2158 | 8.805 1947 | 8.807 1646 | 8.809 1255 | 20 |
| 41 | 8.799 2640 | 8.801 2610 | 8.803 2489 | 8.805 2276 | 8.807 1973 | 8.809 1581 | 19 |
| 42 | 8.799 2974 | 8.801 2942 | 8.803 2819 | 8.805 2605 | 8.807 2301 | 8.809 1907 | 18 |
| 43 | 8.799 3307 | 8.801 3274 | 8.803 3150 | 8.805 2934 | 8.807 2628 | 8.809 2233 | 17 |
| 44 | 8.799 3641 | 8.801 3606 | 8.803 3480 | 8.805 3263 | 8.807 2956 | 8.809 2559 | 16 |
| 45 | 8.799 3974 | 8.801 3938 | 8.803 3811 | 8.805 3592 | 8.807 3283 | 8.809 2885 | 15 |
| 46 | 8.799 4308 | 8.801 4270 | 8.803 4141 | 8.805 3921 | 8.807 3611 | 8.809 3211 | 14 |
| 47 | 8.799 4641 | 8.801 4602 | 8.803 4471 | 8.805 4250 | 8.807 3938 | 8.809 3537 | 13 |
| 48 | 8.799 4975 | 8.801 4934 | 8.803 4802 | 8.805 4579 | 8.807 4265 | 8.809 3863 | 12 |
| 49 | 8.799 5308 | 8.801 5266 | 8.803 5132 | 8.805 4908 | 8.807 4593 | 8.809 4189 | 11 |
| 50 | 8.799 5642 | 8.801 5598 | 8.803 5463 | 8.805 5236 | 8.807 4920 | 8.809 4515 | 10 |
| 51 | 8.799 5975 | 8.801 5930 | 8.803 5793 | 8.805 5565 | 8.807 5247 | 8.809 4841 | 9  |
| 52 | 8.799 6308 | 8.801 6262 | 8.803 6123 | 8.805 5894 | 8.807 5575 | 8.809 5166 | 8  |
| 53 | 8.799 6642 | 8.801 6593 | 8.803 6453 | 8.805 6223 | 8.807 5902 | 8.809 5492 | 7  |
| 54 | 8.799 6975 | 8.801 6925 | 8.803 6784 | 8.805 6551 | 8.807 6229 | 8.809 5818 | 6  |
| 55 | 8.799 7308 | 8.801 7257 | 8.803 7114 | 8.805 6880 | 8.807 6556 | 8.809 6144 | 5  |
| 56 | 8.799 7641 | 8.801 7588 | 8.803 7444 | 8.805 7209 | 8.807 6884 | 8.809 6469 | 4  |
| 57 | 8.799 7975 | 8.801 7920 | 8.803 7774 | 8.805 7537 | 8.807 7211 | 8.809 6795 | 3  |
| 58 | 8.799 8308 | 8.801 8252 | 8.803 8104 | 8.805 7866 | 8.807 7538 | 8.809 7121 | 2  |
| 59 | 8.799 8641 | 8.801 8583 | 8.803 8434 | 8.805 8195 | 8.807 7865 | 8.809 7446 | 1  |
| 60 | 8.799 8974 | 8.801 8915 | 8.803 8764 | 8.805 8523 | 8.807 8192 | 8.809 7772 | 0  |
| "  | 23'        | 22'        | 21'        | 20'        | 19'        | 18'        | "  |



| "  | 36'        | 37'        | 38'        | 39'        | 40'        | 41'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.798 7519 | 8.800 7632 | 8.802 7653 | 8.804 7583 | 8.806 7422 | 8.808 7172 | 60 |
| 1  | 8.798 7855 | 8.800 7966 | 8.802 7986 | 8.804 7914 | 8.806 7752 | 8.808 7501 | 59 |
| 2  | 8.798 8191 | 8.800 8301 | 8.802 8319 | 8.804 8246 | 8.806 8082 | 8.808 7829 | 58 |
| 3  | 8.798 8527 | 8.800 8635 | 8.802 8652 | 8.804 8577 | 8.806 8412 | 8.808 8158 | 57 |
| 4  | 8.798 8864 | 8.800 8970 | 8.802 8983 | 8.804 8908 | 8.806 8742 | 8.808 8486 | 56 |
| 5  | 8.798 9199 | 8.800 9304 | 8.802 9317 | 8.804 9240 | 8.806 9072 | 8.808 8814 | 55 |
| 6  | 8.798 9535 | 8.800 9638 | 8.802 9650 | 8.804 9571 | 8.806 9401 | 8.808 9143 | 54 |
| 7  | 8.798 9870 | 8.800 9973 | 8.802 9983 | 8.804 9902 | 8.806 9731 | 8.808 9471 | 53 |
| 8  | 8.799 0206 | 8.801 0307 | 8.803 0316 | 8.805 0233 | 8.807 0061 | 8.808 9799 | 52 |
| 9  | 8.799 0542 | 8.801 0641 | 8.803 0648 | 8.805 0564 | 8.807 0391 | 8.809 0127 | 51 |
| 10 | 8.799 0878 | 8.801 0975 | 8.803 0981 | 8.805 0896 | 8.807 0720 | 8.809 0455 | 50 |
| 11 | 8.799 1214 | 8.801 1309 | 8.803 1314 | 8.805 1227 | 8.807 1050 | 8.809 0781 | 49 |
| 12 | 8.799 1549 | 8.801 1644 | 8.803 1646 | 8.805 1558 | 8.807 1380 | 8.809 1112 | 48 |
| 13 | 8.799 1885 | 8.801 1978 | 8.803 1979 | 8.805 1889 | 8.807 1709 | 8.809 1440 | 47 |
| 14 | 8.799 2220 | 8.801 2312 | 8.803 2311 | 8.805 2220 | 8.807 2039 | 8.809 1768 | 46 |
| 15 | 8.799 2556 | 8.801 2646 | 8.803 2644 | 8.805 2551 | 8.807 2368 | 8.809 2096 | 45 |
| 16 | 8.799 2892 | 8.801 2980 | 8.803 2976 | 8.805 2882 | 8.807 2698 | 8.809 2424 | 44 |
| 17 | 8.799 3227 | 8.801 3314 | 8.803 3309 | 8.805 3213 | 8.807 3027 | 8.809 2752 | 43 |
| 18 | 8.799 3564 | 8.801 3648 | 8.803 3641 | 8.805 3544 | 8.807 3357 | 8.809 3080 | 42 |
| 19 | 8.799 3898 | 8.801 3982 | 8.803 3974 | 8.805 3875 | 8.807 3686 | 8.809 3408 | 41 |
| 20 | 8.799 4234 | 8.801 4316 | 8.803 4306 | 8.805 4206 | 8.807 4016 | 8.809 3736 | 40 |
| 21 | 8.799 4569 | 8.801 4650 | 8.803 4640 | 8.805 4537 | 8.807 4345 | 8.809 4064 | 39 |
| 22 | 8.799 4905 | 8.801 4984 | 8.803 4971 | 8.805 4868 | 8.807 4673 | 8.809 4392 | 38 |
| 23 | 8.799 5240 | 8.801 5318 | 8.803 5303 | 8.805 5199 | 8.807 5001 | 8.809 4720 | 37 |
| 24 | 8.799 5575 | 8.801 5651 | 8.803 5636 | 8.805 5529 | 8.807 5331 | 8.809 5048 | 36 |
| 25 | 8.799 5912 | 8.801 5985 | 8.803 5968 | 8.805 5860 | 8.807 5662 | 8.809 5375 | 35 |
| 26 | 8.799 6246 | 8.801 6319 | 8.803 6300 | 8.805 6191 | 8.807 5992 | 8.809 5703 | 34 |
| 27 | 8.799 6581 | 8.801 6653 | 8.803 6633 | 8.805 6522 | 8.807 6321 | 8.809 6031 | 33 |
| 28 | 8.799 6917 | 8.801 6987 | 8.803 6965 | 8.805 6852 | 8.807 6650 | 8.809 6359 | 32 |
| 29 | 8.799 7252 | 8.801 7320 | 8.803 7297 | 8.805 7184 | 8.807 6979 | 8.809 6686 | 31 |
| 30 | 8.799 7587 | 8.801 7654 | 8.803 7630 | 8.805 7514 | 8.807 7309 | 8.809 7014 | 30 |
| 31 | 8.799 7922 | 8.801 7988 | 8.803 7961 | 8.805 7844 | 8.807 7638 | 8.809 7342 | 29 |
| 32 | 8.799 8257 | 8.801 8321 | 8.803 8293 | 8.805 8175 | 8.807 7967 | 8.809 7669 | 28 |
| 33 | 8.799 8593 | 8.801 8655 | 8.803 8626 | 8.805 8506 | 8.807 8296 | 8.809 7997 | 27 |
| 34 | 8.799 8928 | 8.801 8988 | 8.803 8958 | 8.805 8836 | 8.807 8625 | 8.809 8325 | 26 |
| 35 | 8.799 9263 | 8.801 9322 | 8.803 9290 | 8.805 9167 | 8.807 8953 | 8.809 8652 | 25 |
| 36 | 8.799 9598 | 8.801 9656 | 8.803 9623 | 8.805 9497 | 8.807 9281 | 8.809 8980 | 24 |
| 37 | 8.799 9933 | 8.801 9989 | 8.803 9954 | 8.805 9828 | 8.807 9612 | 8.809 9307 | 23 |
| 38 | 8.800 0268 | 8.802 0323 | 8.804 0286 | 8.806 0158 | 8.807 9941 | 8.810 0635 | 22 |
| 39 | 8.800 0603 | 8.802 0656 | 8.804 0618 | 8.806 0490 | 8.808 0270 | 8.810 0962 | 21 |
| 40 | 8.800 0938 | 8.802 0989 | 8.804 0950 | 8.806 0819 | 8.808 0599 | 8.810 1290 | 20 |
| 41 | 8.800 1274 | 8.802 1323 | 8.804 1282 | 8.806 1150 | 8.808 0928 | 8.810 1617 | 19 |
| 42 | 8.800 1609 | 8.802 1656 | 8.804 1614 | 8.806 1480 | 8.808 1257 | 8.810 1945 | 18 |
| 43 | 8.800 1943 | 8.802 1989 | 8.804 1945 | 8.806 1810 | 8.808 1586 | 8.810 2272 | 17 |
| 44 | 8.800 2278 | 8.802 2323 | 8.804 2277 | 8.806 2141 | 8.808 1914 | 8.810 2599 | 16 |
| 45 | 8.800 2612 | 8.802 2656 | 8.804 2609 | 8.806 2471 | 8.808 2243 | 8.810 2927 | 15 |
| 46 | 8.800 2947 | 8.802 2990 | 8.804 2941 | 8.806 2801 | 8.808 2572 | 8.810 3254 | 14 |
| 47 | 8.800 3282 | 8.802 3323 | 8.804 3272 | 8.806 3131 | 8.808 2901 | 8.810 3581 | 13 |
| 48 | 8.800 3617 | 8.802 3656 | 8.804 3604 | 8.806 3462 | 8.808 3230 | 8.810 3909 | 12 |
| 49 | 8.800 3952 | 8.802 3989 | 8.804 3936 | 8.806 3792 | 8.808 3558 | 8.810 4236 | 11 |
| 50 | 8.800 4286 | 8.802 4323 | 8.804 4269 | 8.806 4122 | 8.808 3887 | 8.810 4563 | 10 |
| 51 | 8.800 4621 | 8.802 4656 | 8.804 4599 | 8.806 4452 | 8.808 4216 | 8.810 4890 | 9  |
| 52 | 8.800 4956 | 8.802 4989 | 8.804 4931 | 8.806 4782 | 8.808 4544 | 8.810 5217 | 8  |
| 53 | 8.800 5290 | 8.802 5322 | 8.804 5262 | 8.806 5112 | 8.808 4873 | 8.810 5545 | 7  |
| 54 | 8.800 5625 | 8.802 5655 | 8.804 5594 | 8.806 5442 | 8.808 5201 | 8.810 5872 | 6  |
| 55 | 8.800 5959 | 8.802 5988 | 8.804 5925 | 8.806 5773 | 8.808 5530 | 8.810 6199 | 5  |
| 56 | 8.800 6294 | 8.802 6321 | 8.804 6257 | 8.806 6103 | 8.808 5859 | 8.810 5526 | 4  |
| 57 | 8.800 6629 | 8.802 6654 | 8.804 6588 | 8.806 6433 | 8.808 6187 | 8.810 5853 | 3  |
| 58 | 8.800 6963 | 8.802 6987 | 8.804 6920 | 8.806 6762 | 8.808 6516 | 8.810 6180 | 2  |
| 59 | 8.800 7298 | 8.802 7320 | 8.804 7251 | 8.806 7092 | 8.808 6844 | 8.810 6507 | 1  |
| 60 | 8.800 7632 | 8.802 7653 | 8.804 7583 | 8.806 7422 | 8.808 7172 | 8.810 6834 | 0  |
| "  | 23'        | 22'        | 21'        | 20'        | 19'        | 18'        | "  |



| "  | 42'        | 43'        | 44'        | 45'        | 46'        | 47'        | "   |
|----|------------|------------|------------|------------|------------|------------|-----|
| 0  | 8.809 7772 | 8.811 7264 | 8.813 6668 | 8.815 6073 | 8.817 5478 | 8.819 4883 | 65  |
| 1  | 8.809 8698 | 8.811 7988 | 8.813 7692 | 8.815 7397 | 8.817 7102 | 8.819 6807 | 66  |
| 2  | 8.809 8423 | 8.811 7912 | 8.813 7417 | 8.815 7122 | 8.817 6827 | 8.819 6532 | 67  |
| 3  | 8.809 8749 | 8.811 8136 | 8.813 7641 | 8.815 7346 | 8.817 7051 | 8.819 6756 | 68  |
| 4  | 8.809 9074 | 8.811 8460 | 8.813 7965 | 8.815 7670 | 8.817 7375 | 8.819 7080 | 69  |
| 5  | 8.809 9400 | 8.811 8884 | 8.813 8389 | 8.815 8094 | 8.817 7799 | 8.819 7504 | 70  |
| 6  | 8.809 9725 | 8.811 9208 | 8.813 8713 | 8.815 8418 | 8.817 8123 | 8.819 7828 | 71  |
| 7  | 8.810 0051 | 8.811 9532 | 8.813 9037 | 8.815 8742 | 8.817 8447 | 8.819 8152 | 72  |
| 8  | 8.810 0376 | 8.811 9856 | 8.813 9361 | 8.815 9066 | 8.817 8771 | 8.819 8476 | 73  |
| 9  | 8.810 0701 | 8.812 0180 | 8.813 9685 | 8.815 9390 | 8.817 9095 | 8.819 8800 | 74  |
| 10 | 8.810 1027 | 8.812 0504 | 8.814 0009 | 8.816 0014 | 8.817 9719 | 8.819 9124 | 75  |
| 11 | 8.810 1352 | 8.812 0828 | 8.814 0333 | 8.816 0338 | 8.818 0043 | 8.819 9448 | 76  |
| 12 | 8.810 1677 | 8.812 1151 | 8.814 0657 | 8.816 0662 | 8.818 0367 | 8.819 9772 | 77  |
| 13 | 8.810 2003 | 8.812 1475 | 8.814 0981 | 8.816 0986 | 8.818 0691 | 8.819 1000 | 78  |
| 14 | 8.810 2328 | 8.812 1799 | 8.814 1305 | 8.816 1310 | 8.818 0915 | 8.819 1324 | 79  |
| 15 | 8.810 2653 | 8.812 2123 | 8.814 1629 | 8.816 1634 | 8.818 1239 | 8.819 1648 | 80  |
| 16 | 8.810 2978 | 8.812 2447 | 8.814 1953 | 8.816 1958 | 8.818 1563 | 8.819 1972 | 81  |
| 17 | 8.810 3304 | 8.812 2771 | 8.814 2277 | 8.816 2282 | 8.818 1887 | 8.819 2296 | 82  |
| 18 | 8.810 3629 | 8.812 3095 | 8.814 2601 | 8.816 2606 | 8.818 2211 | 8.819 2620 | 83  |
| 19 | 8.810 3954 | 8.812 3419 | 8.814 2925 | 8.816 2930 | 8.818 2535 | 8.819 2944 | 84  |
| 20 | 8.810 4279 | 8.812 3743 | 8.814 3249 | 8.816 3254 | 8.818 2859 | 8.819 3268 | 85  |
| 21 | 8.810 4604 | 8.812 4067 | 8.814 3573 | 8.816 3578 | 8.818 3183 | 8.819 3592 | 86  |
| 22 | 8.810 4929 | 8.812 4391 | 8.814 3897 | 8.816 3902 | 8.818 3507 | 8.819 3916 | 87  |
| 23 | 8.810 5254 | 8.812 4715 | 8.814 4221 | 8.816 4226 | 8.818 3831 | 8.819 4240 | 88  |
| 24 | 8.810 5579 | 8.812 5039 | 8.814 4545 | 8.816 4550 | 8.818 4155 | 8.819 4564 | 89  |
| 25 | 8.810 5904 | 8.812 5363 | 8.814 4869 | 8.816 4874 | 8.818 4479 | 8.819 4888 | 90  |
| 26 | 8.810 6229 | 8.812 5687 | 8.814 5193 | 8.816 5198 | 8.818 4803 | 8.819 5212 | 91  |
| 27 | 8.810 6554 | 8.812 6011 | 8.814 5517 | 8.816 5522 | 8.818 5127 | 8.819 5536 | 92  |
| 28 | 8.810 6879 | 8.812 6335 | 8.814 5841 | 8.816 5846 | 8.818 5451 | 8.819 5860 | 93  |
| 29 | 8.810 7204 | 8.812 6659 | 8.814 6165 | 8.816 6170 | 8.818 5775 | 8.819 6184 | 94  |
| 30 | 8.810 7529 | 8.812 6983 | 8.814 6489 | 8.816 6494 | 8.818 6099 | 8.819 6508 | 95  |
| 31 | 8.810 7854 | 8.812 7307 | 8.814 6813 | 8.816 6818 | 8.818 6423 | 8.819 6832 | 96  |
| 32 | 8.810 8179 | 8.812 7631 | 8.814 7137 | 8.816 7142 | 8.818 6747 | 8.819 7156 | 97  |
| 33 | 8.810 8504 | 8.812 7955 | 8.814 7461 | 8.816 7466 | 8.818 7071 | 8.819 7480 | 98  |
| 34 | 8.810 8829 | 8.812 8279 | 8.814 7785 | 8.816 7790 | 8.818 7395 | 8.819 7804 | 99  |
| 35 | 8.810 9154 | 8.812 8603 | 8.814 8109 | 8.816 8114 | 8.818 7719 | 8.819 8128 | 100 |
| 36 | 8.810 9479 | 8.812 8927 | 8.814 8433 | 8.816 8438 | 8.818 8043 | 8.819 8452 | 101 |
| 37 | 8.810 9804 | 8.812 9251 | 8.814 8757 | 8.816 8762 | 8.818 8367 | 8.819 8776 | 102 |
| 38 | 8.811 0129 | 8.812 9575 | 8.814 9081 | 8.816 9086 | 8.818 8691 | 8.819 9100 | 103 |
| 39 | 8.811 0454 | 8.812 9899 | 8.814 9405 | 8.816 9410 | 8.818 9015 | 8.819 9424 | 104 |
| 40 | 8.811 0779 | 8.813 0223 | 8.814 9729 | 8.816 9734 | 8.818 9339 | 8.819 9748 | 105 |
| 41 | 8.811 1104 | 8.813 0547 | 8.815 0053 | 8.817 0058 | 8.818 9663 | 8.819 1002 | 106 |
| 42 | 8.811 1429 | 8.813 0871 | 8.815 0377 | 8.817 0382 | 8.818 9987 | 8.819 1326 | 107 |
| 43 | 8.811 1754 | 8.813 1195 | 8.815 0701 | 8.817 0706 | 8.819 0311 | 8.819 1650 | 108 |
| 44 | 8.811 2079 | 8.813 1519 | 8.815 1025 | 8.817 1030 | 8.819 0635 | 8.819 1974 | 109 |
| 45 | 8.811 2404 | 8.813 1843 | 8.815 1349 | 8.817 1354 | 8.819 0959 | 8.819 2298 | 110 |
| 46 | 8.811 2729 | 8.813 2167 | 8.815 1673 | 8.817 1678 | 8.819 1283 | 8.819 2622 | 111 |
| 47 | 8.811 3054 | 8.813 2491 | 8.815 1997 | 8.817 2002 | 8.819 1607 | 8.819 2946 | 112 |
| 48 | 8.811 3379 | 8.813 2815 | 8.815 2321 | 8.817 2326 | 8.819 1931 | 8.819 3270 | 113 |
| 49 | 8.811 3704 | 8.813 3139 | 8.815 2645 | 8.817 2650 | 8.819 2255 | 8.819 3594 | 114 |
| 50 | 8.811 4029 | 8.813 3463 | 8.815 2969 | 8.817 2974 | 8.819 2579 | 8.819 3918 | 115 |
| 51 | 8.811 4354 | 8.813 3787 | 8.815 3293 | 8.817 3298 | 8.819 2903 | 8.819 4242 | 116 |
| 52 | 8.811 4679 | 8.813 4111 | 8.815 3617 | 8.817 3622 | 8.819 3227 | 8.819 4566 | 117 |
| 53 | 8.811 4994 | 8.813 4435 | 8.815 3941 | 8.817 3946 | 8.819 3551 | 8.819 4890 | 118 |
| 54 | 8.811 5319 | 8.813 4759 | 8.815 4265 | 8.817 4270 | 8.819 3875 | 8.819 5214 | 119 |
| 55 | 8.811 5644 | 8.813 5083 | 8.815 4589 | 8.817 4594 | 8.819 4199 | 8.819 5538 | 120 |
| 56 | 8.811 5969 | 8.813 5407 | 8.815 4913 | 8.817 4918 | 8.819 4523 | 8.819 5862 | 121 |
| 57 | 8.811 6294 | 8.813 5731 | 8.815 5237 | 8.817 5242 | 8.819 4847 | 8.819 6186 | 122 |
| 58 | 8.811 6619 | 8.813 6055 | 8.815 5561 | 8.817 5566 | 8.819 5171 | 8.819 6510 | 123 |
| 59 | 8.811 6944 | 8.813 6379 | 8.815 5885 | 8.817 5890 | 8.819 5495 | 8.819 6834 | 124 |
| 60 | 8.811 7269 | 8.813 6703 | 8.815 6209 | 8.817 6214 | 8.819 5819 | 8.819 7158 | 125 |
| "  | 17'        | 16'        | 15'        | 14'        | 13'        | 12'        | "   |



| "  | 42'        | 43'        | 44'        | 45'        | 46'        | 47'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.810 6834 | 8.812 6407 | 8.814 5894 | 8.816 5294 | 8.818 4608 | 8.820 3838 | 60 |
| 1  | 8.810 7161 | 8.812 6733 | 8.814 6218 | 8.816 5616 | 8.818 4930 | 8.820 4158 | 59 |
| 2  | 8.810 7488 | 8.812 7058 | 8.814 6542 | 8.816 5939 | 8.818 5251 | 8.820 4478 | 58 |
| 3  | 8.810 7815 | 8.812 7384 | 8.814 6866 | 8.816 6262 | 8.818 5572 | 8.820 4797 | 57 |
| 4  | 8.810 8141 | 8.812 7709 | 8.814 7190 | 8.816 6584 | 8.818 5893 | 8.820 5117 | 56 |
| 5  | 8.810 8468 | 8.812 8034 | 8.814 7514 | 8.816 6907 | 8.818 6214 | 8.820 5437 | 55 |
| 6  | 8.810 8795 | 8.812 8360 | 8.814 7838 | 8.816 7229 | 8.818 6535 | 8.820 5757 | 54 |
| 7  | 8.810 9122 | 8.812 8685 | 8.814 8161 | 8.816 7552 | 8.818 6856 | 8.820 6076 | 53 |
| 8  | 8.810 9449 | 8.812 9011 | 8.814 8485 | 8.816 7874 | 8.818 7177 | 8.820 6396 | 52 |
| 9  | 8.810 9775 | 8.812 9336 | 8.814 8809 | 8.816 8196 | 8.818 7498 | 8.820 6715 | 51 |
| 10 | 8.811 0102 | 8.812 9661 | 8.814 9133 | 8.816 8519 | 8.818 7819 | 8.820 7035 | 50 |
| 11 | 8.811 0429 | 8.812 9986 | 8.814 9457 | 8.816 8841 | 8.818 8140 | 8.820 7354 | 49 |
| 12 | 8.811 0756 | 8.813 0312 | 8.814 9781 | 8.816 9164 | 8.818 8461 | 8.820 7674 | 48 |
| 13 | 8.811 1082 | 8.813 0637 | 8.815 0104 | 8.816 9486 | 8.818 8782 | 8.820 7994 | 47 |
| 14 | 8.811 1409 | 8.813 0962 | 8.815 0428 | 8.816 9808 | 8.818 9103 | 8.820 8313 | 46 |
| 15 | 8.811 1735 | 8.813 1287 | 8.815 0752 | 8.817 0130 | 8.818 9424 | 8.820 8632 | 45 |
| 16 | 8.811 2062 | 8.813 1612 | 8.815 1075 | 8.817 0453 | 8.818 9745 | 8.820 8952 | 44 |
| 17 | 8.811 2389 | 8.813 1937 | 8.815 1399 | 8.817 0775 | 8.819 0065 | 8.820 9271 | 43 |
| 18 | 8.811 2715 | 8.813 2262 | 8.815 1723 | 8.817 1097 | 8.819 0386 | 8.820 9591 | 42 |
| 19 | 8.811 3042 | 8.813 2587 | 8.815 2046 | 8.817 1419 | 8.819 0707 | 8.820 9910 | 41 |
| 20 | 8.811 3368 | 8.813 2912 | 8.815 2370 | 8.817 1741 | 8.819 1028 | 8.821 0229 | 40 |
| 21 | 8.811 3694 | 8.813 3237 | 8.815 2694 | 8.817 2064 | 8.819 1348 | 8.821 0549 | 39 |
| 22 | 8.811 4021 | 8.813 3562 | 8.815 3017 | 8.817 2386 | 8.819 1669 | 8.821 0868 | 38 |
| 23 | 8.811 4347 | 8.813 3887 | 8.815 3341 | 8.817 2708 | 8.819 1990 | 8.821 1187 | 37 |
| 24 | 8.811 4674 | 8.813 4212 | 8.815 3664 | 8.817 3030 | 8.819 2310 | 8.821 1507 | 36 |
| 25 | 8.811 5000 | 8.813 4537 | 8.815 3988 | 8.817 3352 | 8.819 2631 | 8.821 1826 | 35 |
| 26 | 8.811 5326 | 8.813 4862 | 8.815 4311 | 8.817 3674 | 8.819 2952 | 8.821 2145 | 34 |
| 27 | 8.811 5653 | 8.813 5187 | 8.815 4634 | 8.817 3996 | 8.819 3272 | 8.821 2464 | 33 |
| 28 | 8.811 5979 | 8.813 5512 | 8.815 4958 | 8.817 4318 | 8.819 3593 | 8.821 2783 | 32 |
| 29 | 8.811 6305 | 8.813 5837 | 8.815 5281 | 8.817 4640 | 8.819 3913 | 8.821 3102 | 31 |
| 30 | 8.811 6631 | 8.813 6161 | 8.815 5605 | 8.817 4962 | 8.819 4234 | 8.821 3422 | 30 |
| 31 | 8.811 6958 | 8.813 6486 | 8.815 5928 | 8.817 5284 | 8.819 4554 | 8.821 3741 | 29 |
| 32 | 8.811 7284 | 8.813 6811 | 8.815 6251 | 8.817 5606 | 8.819 4875 | 8.821 4060 | 28 |
| 33 | 8.811 7610 | 8.813 7136 | 8.815 6574 | 8.817 5927 | 8.819 5195 | 8.821 4379 | 27 |
| 34 | 8.811 7936 | 8.813 7460 | 8.815 6898 | 8.817 6249 | 8.819 5516 | 8.821 4698 | 26 |
| 35 | 8.811 8262 | 8.813 7785 | 8.815 7221 | 8.817 6571 | 8.819 5836 | 8.821 5017 | 25 |
| 36 | 8.811 8588 | 8.813 8110 | 8.815 7544 | 8.817 6893 | 8.819 6156 | 8.821 5336 | 24 |
| 37 | 8.811 8914 | 8.813 8434 | 8.815 7867 | 8.817 7215 | 8.819 6477 | 8.821 5655 | 23 |
| 38 | 8.811 9241 | 8.813 8759 | 8.815 8190 | 8.817 7536 | 8.819 6797 | 8.821 5974 | 22 |
| 39 | 8.811 9567 | 8.813 9083 | 8.815 8514 | 8.817 7858 | 8.819 7117 | 8.821 6292 | 21 |
| 40 | 8.811 9893 | 8.813 9408 | 8.815 8837 | 8.817 8180 | 8.819 7438 | 8.821 6611 | 20 |
| 41 | 8.812 0218 | 8.813 9732 | 8.815 9160 | 8.817 8501 | 8.819 7758 | 8.821 6930 | 19 |
| 42 | 8.812 0544 | 8.814 0057 | 8.815 9483 | 8.817 8823 | 8.819 8078 | 8.821 7249 | 18 |
| 43 | 8.812 0870 | 8.814 0381 | 8.815 9806 | 8.817 9145 | 8.819 8398 | 8.821 7568 | 17 |
| 44 | 8.812 1196 | 8.814 0706 | 8.816 0129 | 8.817 9466 | 8.819 8718 | 8.821 7887 | 16 |
| 45 | 8.812 1522 | 8.814 1030 | 8.816 0452 | 8.817 9788 | 8.819 9039 | 8.821 8205 | 15 |
| 46 | 8.812 1848 | 8.814 1355 | 8.816 0775 | 8.818 0109 | 8.819 9359 | 8.821 8524 | 14 |
| 47 | 8.812 2174 | 8.814 1679 | 8.816 1098 | 8.818 0431 | 8.819 9679 | 8.821 8843 | 13 |
| 48 | 8.812 2500 | 8.814 2003 | 8.816 1421 | 8.818 0752 | 8.819 9999 | 8.821 9161 | 12 |
| 49 | 8.812 2825 | 8.814 2328 | 8.816 1744 | 8.818 1074 | 8.820 0319 | 8.821 9480 | 11 |
| 50 | 8.812 3151 | 8.814 2652 | 8.816 2066 | 8.818 1395 | 8.820 0639 | 8.821 9799 | 10 |
| 51 | 8.812 3477 | 8.814 2976 | 8.816 2389 | 8.818 1717 | 8.820 0959 | 8.822 0117 | 9  |
| 52 | 8.812 3803 | 8.814 3301 | 8.816 2712 | 8.818 2038 | 8.820 1279 | 8.822 0436 | 8  |
| 53 | 8.812 4128 | 8.814 3625 | 8.816 3035 | 8.818 2359 | 8.820 1599 | 8.822 0755 | 7  |
| 54 | 8.812 4454 | 8.814 3949 | 8.816 3358 | 8.818 2681 | 8.820 1919 | 8.822 1073 | 6  |
| 55 | 8.812 4780 | 8.814 4273 | 8.816 3680 | 8.818 3002 | 8.820 2239 | 8.822 1392 | 5  |
| 56 | 8.812 5105 | 8.814 4597 | 8.816 4003 | 8.818 3323 | 8.820 2559 | 8.822 1710 | 4  |
| 57 | 8.812 5431 | 8.814 4921 | 8.816 4326 | 8.818 3645 | 8.820 2879 | 8.822 2029 | 3  |
| 58 | 8.812 5756 | 8.814 5246 | 8.816 4649 | 8.818 3966 | 8.820 3199 | 8.822 2347 | 2  |
| 59 | 8.812 6082 | 8.814 5570 | 8.816 4971 | 8.818 4287 | 8.820 3518 | 8.822 2666 | 1  |
| 60 | 8.812 6407 | 8.814 5894 | 8.816 5294 | 8.818 4608 | 8.820 3838 | 8.822 2984 | 0  |
| "  | 17'        | 16'        | 15'        | 14'        | 13'        | 12'        | "  |



| "  | 48'        | 49'        | 50'        | 51'        | 52'        | 53'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.821 3425 | 8.823 2404 | 8.825 1299 | 8.827 0112 | 8.828 8844 | 8.830 7495 | 60 |
| 1  | 8.821 3742 | 8.823 2719 | 8.825 1613 | 8.827 0425 | 8.828 9155 | 8.830 7805 | 59 |
| 2  | 8.821 4059 | 8.823 3035 | 8.825 1928 | 8.827 0738 | 8.828 9467 | 8.830 8115 | 58 |
| 3  | 8.821 4376 | 8.823 3350 | 8.825 2242 | 8.827 1051 | 8.828 9778 | 8.830 8425 | 57 |
| 4  | 8.821 4693 | 8.823 3666 | 8.825 2556 | 8.827 1364 | 8.829 0090 | 8.830 8735 | 56 |
| 5  | 8.821 5010 | 8.823 3981 | 8.825 2870 | 8.827 1676 | 8.829 0401 | 8.830 9045 | 55 |
| 6  | 8.821 5327 | 8.823 4297 | 8.825 3184 | 8.827 1989 | 8.829 0713 | 8.830 9356 | 54 |
| 7  | 8.821 5644 | 8.823 4612 | 8.825 3498 | 8.827 2302 | 8.829 1024 | 8.830 9666 | 53 |
| 8  | 8.821 5961 | 8.823 4928 | 8.825 3812 | 8.827 2615 | 8.829 1335 | 8.830 9976 | 52 |
| 9  | 8.821 6277 | 8.823 5243 | 8.825 4126 | 8.827 2927 | 8.829 1647 | 8.831 0286 | 51 |
| 10 | 8.821 6594 | 8.823 5559 | 8.825 4440 | 8.827 3240 | 8.829 1958 | 8.831 0596 | 50 |
| 11 | 8.821 6911 | 8.823 5874 | 8.825 4754 | 8.827 3552 | 8.829 2269 | 8.831 0905 | 49 |
| 12 | 8.821 7228 | 8.823 6189 | 8.825 5068 | 8.827 3865 | 8.829 2581 | 8.831 1215 | 48 |
| 13 | 8.821 7544 | 8.823 6505 | 8.825 5382 | 8.827 4178 | 8.829 2892 | 8.831 1525 | 47 |
| 14 | 8.821 7861 | 8.823 6820 | 8.825 5696 | 8.827 4490 | 8.829 3203 | 8.831 1835 | 46 |
| 15 | 8.821 8178 | 8.823 7135 | 8.825 6010 | 8.827 4803 | 8.829 3514 | 8.831 2145 | 45 |
| 16 | 8.821 8494 | 8.823 7451 | 8.825 6324 | 8.827 5115 | 8.829 3825 | 8.831 2455 | 44 |
| 17 | 8.821 8811 | 8.823 7766 | 8.825 6638 | 8.827 5428 | 8.829 4137 | 8.831 2765 | 43 |
| 18 | 8.821 9128 | 8.823 8081 | 8.825 6953 | 8.827 5740 | 8.829 4448 | 8.831 3074 | 42 |
| 19 | 8.821 9444 | 8.823 8396 | 8.825 7265 | 8.827 6053 | 8.829 4759 | 8.831 3384 | 41 |
| 20 | 8.821 9761 | 8.823 8711 | 8.825 7579 | 8.827 6365 | 8.829 5070 | 8.831 3694 | 40 |
| 21 | 8.822 0077 | 8.823 9026 | 8.825 7893 | 8.827 6678 | 8.829 5381 | 8.831 4004 | 39 |
| 22 | 8.822 0394 | 8.823 9342 | 8.825 8207 | 8.827 6990 | 8.829 5692 | 8.831 4313 | 38 |
| 23 | 8.822 0710 | 8.823 9657 | 8.825 8520 | 8.827 7302 | 8.829 6003 | 8.831 4623 | 37 |
| 24 | 8.822 1027 | 8.823 9972 | 8.825 8834 | 8.827 7615 | 8.829 6314 | 8.831 4933 | 36 |
| 25 | 8.822 1343 | 8.824 0287 | 8.825 9148 | 8.827 7927 | 8.829 6625 | 8.831 5242 | 35 |
| 26 | 8.822 1659 | 8.824 0602 | 8.825 9462 | 8.827 8239 | 8.829 6936 | 8.831 5552 | 34 |
| 27 | 8.822 1976 | 8.824 0917 | 8.825 9775 | 8.827 8552 | 8.829 7247 | 8.831 5862 | 33 |
| 28 | 8.822 2292 | 8.824 1232 | 8.826 0089 | 8.827 8864 | 8.829 7558 | 8.831 6171 | 32 |
| 29 | 8.822 2609 | 8.824 1547 | 8.826 0402 | 8.827 9176 | 8.829 7869 | 8.831 6481 | 31 |
| 30 | 8.822 2925 | 8.824 1862 | 8.826 0716 | 8.827 9488 | 8.829 8179 | 8.831 6790 | 30 |
| 31 | 8.822 3241 | 8.824 2177 | 8.826 1029 | 8.827 9800 | 8.829 8490 | 8.831 7100 | 29 |
| 32 | 8.822 3557 | 8.824 2491 | 8.826 1343 | 8.828 0113 | 8.829 8801 | 8.831 7409 | 28 |
| 33 | 8.822 3874 | 8.824 2806 | 8.826 1656 | 8.828 0425 | 8.829 9112 | 8.831 7719 | 27 |
| 34 | 8.822 4190 | 8.824 3121 | 8.826 1970 | 8.828 0737 | 8.829 9423 | 8.831 8028 | 26 |
| 35 | 8.822 4506 | 8.824 3436 | 8.826 2283 | 8.828 1049 | 8.829 9733 | 8.831 8337 | 25 |
| 36 | 8.822 4822 | 8.824 3751 | 8.826 2597 | 8.828 1361 | 8.830 0044 | 8.831 8647 | 24 |
| 37 | 8.822 5138 | 8.824 4066 | 8.826 2910 | 8.828 1673 | 8.830 0355 | 8.831 8956 | 23 |
| 38 | 8.822 5455 | 8.824 4380 | 8.826 3224 | 8.828 1985 | 8.830 0666 | 8.831 9266 | 22 |
| 39 | 8.822 5771 | 8.824 4695 | 8.826 3537 | 8.828 2297 | 8.830 0976 | 8.831 9575 | 21 |
| 40 | 8.822 6087 | 8.824 5010 | 8.826 3850 | 8.828 2609 | 8.830 1287 | 8.831 9884 | 20 |
| 41 | 8.822 6403 | 8.824 5324 | 8.826 4164 | 8.828 2921 | 8.830 1597 | 8.832 0193 | 19 |
| 42 | 8.822 6719 | 8.824 5639 | 8.826 4477 | 8.828 3233 | 8.830 1908 | 8.832 0503 | 18 |
| 43 | 8.822 7035 | 8.824 5954 | 8.826 4790 | 8.828 3545 | 8.830 2219 | 8.832 0812 | 17 |
| 44 | 8.822 7351 | 8.824 6268 | 8.826 5103 | 8.828 3857 | 8.830 2529 | 8.832 1121 | 16 |
| 45 | 8.822 7667 | 8.824 6583 | 8.826 5417 | 8.828 4169 | 8.830 2840 | 8.832 1430 | 15 |
| 46 | 8.822 7983 | 8.824 6898 | 8.826 5730 | 8.828 4480 | 8.830 3150 | 8.832 1740 | 14 |
| 47 | 8.822 8299 | 8.824 7212 | 8.826 6043 | 8.828 4792 | 8.830 3461 | 8.832 2049 | 13 |
| 48 | 8.822 8615 | 8.824 7527 | 8.826 6356 | 8.828 5104 | 8.830 3771 | 8.832 2358 | 12 |
| 49 | 8.822 8931 | 8.824 7841 | 8.826 6669 | 8.828 5416 | 8.830 4082 | 8.832 2667 | 11 |
| 50 | 8.822 9246 | 8.824 8156 | 8.826 6982 | 8.828 5728 | 8.830 4392 | 8.832 2976 | 10 |
| 51 | 8.822 9562 | 8.824 8470 | 8.826 7296 | 8.828 6039 | 8.830 4702 | 8.832 3285 | 9  |
| 52 | 8.822 9878 | 8.824 8784 | 8.826 7609 | 8.828 6351 | 8.830 5013 | 8.832 3594 | 8  |
| 53 | 8.823 0194 | 8.824 9099 | 8.826 7922 | 8.828 6663 | 8.830 5323 | 8.832 3903 | 7  |
| 54 | 8.823 0510 | 8.824 9413 | 8.826 8235 | 8.828 6974 | 8.830 5633 | 8.832 4212 | 6  |
| 55 | 8.823 0825 | 8.824 9728 | 8.826 8548 | 8.828 7286 | 8.830 5944 | 8.832 4521 | 5  |
| 56 | 8.823 1141 | 8.825 0042 | 8.826 8861 | 8.828 7598 | 8.830 6254 | 8.832 4830 | 4  |
| 57 | 8.823 1457 | 8.825 0356 | 8.826 9174 | 8.828 7909 | 8.830 6564 | 8.832 5139 | 3  |
| 58 | 8.823 1772 | 8.825 0671 | 8.826 9486 | 8.828 8221 | 8.830 6874 | 8.832 5448 | 2  |
| 59 | 8.823 2088 | 8.825 0985 | 8.826 9799 | 8.828 8532 | 8.830 7185 | 8.832 5757 | 1  |
| 60 | 8.823 2404 | 8.825 1299 | 8.827 0112 | 8.828 8844 | 8.830 7495 | 8.832 6066 | 0  |
| "  | 11'        | 10'        | 9'         | 8'         | 7'         | 6'         | "  |



| "  | 48'        | 49'        | 50'        | 51'        | 52'        | 53'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.822 2984 | 8.824 2046 | 8.826 1026 | 8.827 9924 | 8.829 8741 | 8.831 7478 | 60 |
| 1  | 8.822 3302 | 8.824 2363 | 8.826 1342 | 8.828 0239 | 8.829 9054 | 8.831 7789 | 59 |
| 2  | 8.822 3621 | 8.824 2680 | 8.826 1657 | 8.828 0553 | 8.829 9367 | 8.831 8101 | 58 |
| 3  | 8.822 3939 | 8.824 2997 | 8.826 1973 | 8.828 0867 | 8.829 9680 | 8.831 8412 | 57 |
| 4  | 8.822 4257 | 8.824 3314 | 8.826 2289 | 8.828 1181 | 8.829 9993 | 8.831 8724 | 56 |
| 5  | 8.822 4576 | 8.824 3631 | 8.826 2604 | 8.828 1495 | 8.830 0306 | 8.831 9035 | 55 |
| 6  | 8.822 4894 | 8.824 3948 | 8.826 2920 | 8.828 1810 | 8.830 0618 | 8.831 9347 | 54 |
| 7  | 8.822 5212 | 8.824 4265 | 8.826 3235 | 8.828 2124 | 8.830 0931 | 8.831 9658 | 53 |
| 8  | 8.822 5530 | 8.824 4582 | 8.826 3551 | 8.828 2438 | 8.830 1244 | 8.831 9970 | 52 |
| 9  | 8.822 5849 | 8.824 4899 | 8.826 3866 | 8.828 2752 | 8.830 1557 | 8.832 0281 | 51 |
| 10 | 8.822 6167 | 8.824 5215 | 8.826 4182 | 8.828 3066 | 8.830 1869 | 8.832 0593 | 50 |
| 11 | 8.822 6485 | 8.824 5532 | 8.826 4497 | 8.828 3380 | 8.830 2182 | 8.832 0904 | 49 |
| 12 | 8.822 6803 | 8.824 5849 | 8.826 4812 | 8.828 3694 | 8.830 2495 | 8.832 1215 | 48 |
| 13 | 8.822 7121 | 8.824 6166 | 8.826 5128 | 8.828 4008 | 8.830 2808 | 8.832 1527 | 47 |
| 14 | 8.822 7439 | 8.824 6482 | 8.826 5443 | 8.828 4322 | 8.830 3120 | 8.832 1838 | 46 |
| 15 | 8.822 7757 | 8.824 6799 | 8.826 5758 | 8.828 4636 | 8.830 3433 | 8.832 2149 | 45 |
| 16 | 8.822 8075 | 8.824 7116 | 8.826 6074 | 8.828 4950 | 8.830 3745 | 8.832 2460 | 44 |
| 17 | 8.822 8393 | 8.824 7432 | 8.826 6389 | 8.828 5264 | 8.830 4058 | 8.832 2772 | 43 |
| 18 | 8.822 8711 | 8.824 7749 | 8.826 6704 | 8.828 5578 | 8.830 4371 | 8.832 3083 | 42 |
| 19 | 8.822 9029 | 8.824 8066 | 8.826 7019 | 8.828 5892 | 8.830 4683 | 8.832 3394 | 41 |
| 20 | 8.822 9347 | 8.824 8382 | 8.826 7335 | 8.828 6206 | 8.830 4996 | 8.832 3705 | 40 |
| 21 | 8.822 9665 | 8.824 8699 | 8.826 7650 | 8.828 6519 | 8.830 5308 | 8.832 4016 | 39 |
| 22 | 8.822 9983 | 8.824 9015 | 8.826 7965 | 8.828 6833 | 8.830 5620 | 8.832 4328 | 38 |
| 23 | 8.823 0301 | 8.824 9332 | 8.826 8280 | 8.828 7147 | 8.830 5933 | 8.832 4639 | 37 |
| 24 | 8.823 0619 | 8.824 9648 | 8.826 8595 | 8.828 7461 | 8.830 6245 | 8.832 4950 | 36 |
| 25 | 8.823 0937 | 8.824 9965 | 8.826 8910 | 8.828 7774 | 8.830 6558 | 8.832 5261 | 35 |
| 26 | 8.823 1254 | 8.825 0281 | 8.826 9225 | 8.828 8088 | 8.830 6870 | 8.832 5572 | 34 |
| 27 | 8.823 1572 | 8.825 0597 | 8.826 9540 | 8.828 8402 | 8.830 7182 | 8.832 5883 | 33 |
| 28 | 8.823 1890 | 8.825 0914 | 8.826 9855 | 8.828 8716 | 8.830 7495 | 8.832 6194 | 32 |
| 29 | 8.823 2208 | 8.825 1230 | 8.827 0170 | 8.828 9029 | 8.830 7807 | 8.832 6505 | 31 |
| 30 | 8.823 2526 | 8.825 1547 | 8.827 0485 | 8.828 9343 | 8.830 8119 | 8.832 6816 | 30 |
| 31 | 8.823 2843 | 8.825 1863 | 8.827 0800 | 8.828 9656 | 8.830 8432 | 8.832 7127 | 29 |
| 32 | 8.823 3161 | 8.825 2179 | 8.827 1115 | 8.828 9970 | 8.830 8744 | 8.832 7438 | 28 |
| 33 | 8.823 3479 | 8.825 2495 | 8.827 1430 | 8.829 0284 | 8.830 9056 | 8.832 7749 | 27 |
| 34 | 8.823 3796 | 8.825 2812 | 8.827 1745 | 8.829 0597 | 8.830 9368 | 8.832 8059 | 26 |
| 35 | 8.823 4114 | 8.825 3128 | 8.827 2060 | 8.829 0911 | 8.830 9680 | 8.832 8370 | 25 |
| 36 | 8.823 4431 | 8.825 3444 | 8.827 2375 | 8.829 1224 | 8.830 9993 | 8.832 8681 | 24 |
| 37 | 8.823 4749 | 8.825 3760 | 8.827 2690 | 8.829 1538 | 8.831 0305 | 8.832 8992 | 23 |
| 38 | 8.823 5066 | 8.825 4077 | 8.827 3004 | 8.829 1851 | 8.831 0617 | 8.832 9303 | 22 |
| 39 | 8.823 5384 | 8.825 4393 | 8.827 3319 | 8.829 2164 | 8.831 0929 | 8.832 9613 | 21 |
| 40 | 8.823 5701 | 8.825 4709 | 8.827 3634 | 8.829 2478 | 8.831 1241 | 8.832 9924 | 20 |
| 41 | 8.823 6019 | 8.825 5025 | 8.827 3949 | 8.829 2791 | 8.831 1553 | 8.833 0235 | 19 |
| 42 | 8.823 6336 | 8.825 5341 | 8.827 4263 | 8.829 3105 | 8.831 1865 | 8.833 0546 | 18 |
| 43 | 8.823 6654 | 8.825 5657 | 8.827 4578 | 8.829 3418 | 8.831 2177 | 8.833 0856 | 17 |
| 44 | 8.823 6971 | 8.825 5973 | 8.827 4893 | 8.829 3731 | 8.831 2489 | 8.833 1167 | 16 |
| 45 | 8.823 7289 | 8.825 6289 | 8.827 5207 | 8.829 4045 | 8.831 2801 | 8.833 1478 | 15 |
| 46 | 8.823 7606 | 8.825 6605 | 8.827 5522 | 8.829 4358 | 8.831 3113 | 8.833 1788 | 14 |
| 47 | 8.823 7923 | 8.825 6921 | 8.827 5837 | 8.829 4671 | 8.831 3425 | 8.833 2099 | 13 |
| 48 | 8.823 8241 | 8.825 7237 | 8.827 6151 | 8.829 4984 | 8.831 3737 | 8.833 2409 | 12 |
| 49 | 8.823 8558 | 8.825 7553 | 8.827 6466 | 8.829 5297 | 8.831 4049 | 8.833 2720 | 11 |
| 50 | 8.823 8875 | 8.825 7869 | 8.827 6780 | 8.829 5611 | 8.831 4360 | 8.833 3030 | 10 |
| 51 | 8.823 9192 | 8.825 8185 | 8.827 7095 | 8.829 5924 | 8.831 4672 | 8.833 3341 | 9  |
| 52 | 8.823 9509 | 8.825 8500 | 8.827 7409 | 8.829 6237 | 8.831 4984 | 8.833 3651 | 8  |
| 53 | 8.823 9827 | 8.825 8816 | 8.827 7724 | 8.829 6550 | 8.831 5296 | 8.833 3962 | 7  |
| 54 | 8.824 0144 | 8.825 9132 | 8.827 8038 | 8.829 6863 | 8.831 5608 | 8.833 4272 | 6  |
| 55 | 8.824 0461 | 8.825 9448 | 8.827 8353 | 8.829 7176 | 8.831 5919 | 8.833 4583 | 5  |
| 56 | 8.824 0778 | 8.825 9763 | 8.827 8667 | 8.829 7489 | 8.831 6231 | 8.833 4893 | 4  |
| 57 | 8.824 1095 | 8.826 0079 | 8.827 8981 | 8.829 7802 | 8.831 6543 | 8.833 5203 | 3  |
| 58 | 8.824 1412 | 8.826 0395 | 8.827 9296 | 8.829 8115 | 8.831 6854 | 8.833 5514 | 2  |
| 59 | 8.824 1729 | 8.826 0711 | 8.827 9610 | 8.829 8428 | 8.831 7166 | 8.833 5824 | 1  |
| 60 | 8.824 2046 | 8.826 1026 | 8.827 9924 | 8.829 8741 | 8.831 7478 | 8.833 6134 | 0  |
| "  | 11'        | 10'        | 9'         | 8'         | 7'         | 6'         | "  |



| "  | 54'        | 55'        | 56'        | 57'        | 58'        | 59'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.832 6066 | 8.834 4557 | 8.836 2969 | 8.838 1304 | 8.839 9561 | 8.841 7741 | 60 |
| 1  | 8.832 6374 | 8.834 4864 | 8.836 3276 | 8.838 1609 | 8.839 9865 | 8.841 8043 | 59 |
| 2  | 8.832 6683 | 8.834 5172 | 8.836 3582 | 8.838 1914 | 8.840 0168 | 8.841 8346 | 58 |
| 3  | 8.832 6992 | 8.834 5479 | 8.836 3888 | 8.838 2219 | 8.840 0472 | 8.841 8648 | 57 |
| 4  | 8.832 7301 | 8.834 5787 | 8.836 4194 | 8.838 2523 | 8.840 0775 | 8.841 8950 | 56 |
| 5  | 8.832 7610 | 8.834 6094 | 8.836 4500 | 8.838 2828 | 8.840 1079 | 8.841 9253 | 55 |
| 6  | 8.832 7918 | 8.834 6402 | 8.836 4806 | 8.838 3133 | 8.840 1382 | 8.841 9555 | 54 |
| 7  | 8.832 8227 | 8.834 6709 | 8.836 5112 | 8.838 3438 | 8.840 1686 | 8.841 9857 | 53 |
| 8  | 8.832 8536 | 8.834 7016 | 8.836 5419 | 8.838 3743 | 8.840 1989 | 8.842 0159 | 52 |
| 9  | 8.832 8844 | 8.834 7324 | 8.836 5725 | 8.838 4047 | 8.840 2293 | 8.842 0462 | 51 |
| 10 | 8.832 9153 | 8.834 7631 | 8.836 6031 | 8.838 4352 | 8.840 2596 | 8.842 0764 | 50 |
| 11 | 8.832 9462 | 8.834 7938 | 8.836 6337 | 8.838 4657 | 8.840 2900 | 8.842 1066 | 49 |
| 12 | 8.832 9770 | 8.834 8246 | 8.836 6643 | 8.838 4961 | 8.840 3203 | 8.842 1368 | 48 |
| 13 | 8.833 0079 | 8.834 8553 | 8.836 6949 | 8.838 5266 | 8.840 3506 | 8.842 1670 | 47 |
| 14 | 8.833 0387 | 8.834 8860 | 8.836 7254 | 8.838 5571 | 8.840 3810 | 8.842 1972 | 46 |
| 15 | 8.833 0696 | 8.834 9167 | 8.836 7560 | 8.838 5875 | 8.840 4113 | 8.842 2274 | 45 |
| 16 | 8.833 1004 | 8.834 9475 | 8.836 7866 | 8.838 6180 | 8.840 4416 | 8.842 2576 | 44 |
| 17 | 8.833 1313 | 8.834 9782 | 8.836 8172 | 8.838 6485 | 8.840 4720 | 8.842 2878 | 43 |
| 18 | 8.833 1621 | 8.835 0089 | 8.836 8478 | 8.838 6789 | 8.840 5023 | 8.842 3180 | 42 |
| 19 | 8.833 1930 | 8.835 0396 | 8.836 8784 | 8.838 7094 | 8.840 5326 | 8.842 3482 | 41 |
| 20 | 8.833 2238 | 8.835 0703 | 8.836 9090 | 8.838 7398 | 8.840 5629 | 8.842 3784 | 40 |
| 21 | 8.833 2547 | 8.835 1010 | 8.836 9395 | 8.838 7703 | 8.840 5933 | 8.842 4086 | 39 |
| 22 | 8.833 2855 | 8.835 1317 | 8.836 9701 | 8.838 8007 | 8.840 6236 | 8.842 4388 | 38 |
| 23 | 8.833 3163 | 8.835 1624 | 8.837 0007 | 8.838 8312 | 8.840 6539 | 8.842 4690 | 37 |
| 24 | 8.833 3472 | 8.835 1931 | 8.837 0313 | 8.838 8616 | 8.840 6842 | 8.842 4992 | 36 |
| 25 | 8.833 3780 | 8.835 2238 | 8.837 0618 | 8.838 8920 | 8.840 7145 | 8.842 5294 | 35 |
| 26 | 8.833 4088 | 8.835 2545 | 8.837 0924 | 8.838 9225 | 8.840 7448 | 8.842 5596 | 34 |
| 27 | 8.833 4396 | 8.835 2852 | 8.837 1230 | 8.838 9529 | 8.840 7751 | 8.842 5897 | 33 |
| 28 | 8.833 4705 | 8.835 3159 | 8.837 1535 | 8.838 9833 | 8.840 8055 | 8.842 6199 | 32 |
| 29 | 8.833 5013 | 8.835 3466 | 8.837 1841 | 8.839 0138 | 8.840 8358 | 8.842 6501 | 31 |
| 30 | 8.833 5321 | 8.835 3773 | 8.837 2146 | 8.839 0442 | 8.840 8661 | 8.842 6803 | 30 |
| 31 | 8.833 5629 | 8.835 4080 | 8.837 2452 | 8.839 0746 | 8.840 8964 | 8.842 7104 | 29 |
| 32 | 8.833 5937 | 8.835 4387 | 8.837 2758 | 8.839 1051 | 8.840 9267 | 8.842 7406 | 28 |
| 33 | 8.833 6246 | 8.835 4694 | 8.837 3063 | 8.839 1355 | 8.840 9569 | 8.842 7708 | 27 |
| 34 | 8.833 6554 | 8.835 5000 | 8.837 3369 | 8.839 1659 | 8.840 9872 | 8.842 8009 | 26 |
| 35 | 8.833 6862 | 8.835 5307 | 8.837 3674 | 8.839 1963 | 8.841 0175 | 8.842 8311 | 25 |
| 36 | 8.833 7170 | 8.835 5614 | 8.837 3979 | 8.839 2267 | 8.841 0478 | 8.842 8613 | 24 |
| 37 | 8.833 7478 | 8.835 5921 | 8.837 4285 | 8.839 2572 | 8.841 0781 | 8.842 8914 | 23 |
| 38 | 8.833 7786 | 8.835 6227 | 8.837 4590 | 8.839 2876 | 8.841 1084 | 8.842 9216 | 22 |
| 39 | 8.833 8094 | 8.835 6534 | 8.837 4896 | 8.839 3180 | 8.841 1387 | 8.842 9517 | 21 |
| 40 | 8.833 8402 | 8.835 6841 | 8.837 5201 | 8.839 3484 | 8.841 1690 | 8.842 9819 | 20 |
| 41 | 8.833 8710 | 8.835 7147 | 8.837 5506 | 8.839 3788 | 8.841 1992 | 8.843 0120 | 19 |
| 42 | 8.833 9018 | 8.835 7454 | 8.837 5812 | 8.839 4092 | 8.841 2295 | 8.843 0422 | 18 |
| 43 | 8.833 9326 | 8.835 7761 | 8.837 6117 | 8.839 4396 | 8.841 2598 | 8.843 0723 | 17 |
| 44 | 8.833 9634 | 8.835 8067 | 8.837 6422 | 8.839 4700 | 8.841 2901 | 8.843 1025 | 16 |
| 45 | 8.833 9941 | 8.835 8374 | 8.837 6728 | 8.839 5004 | 8.841 3203 | 8.843 1326 | 15 |
| 46 | 8.834 0249 | 8.835 8680 | 8.837 7033 | 8.839 5308 | 8.841 3506 | 8.843 1628 | 14 |
| 47 | 8.834 0557 | 8.835 8987 | 8.837 7338 | 8.839 5612 | 8.841 3809 | 8.843 1929 | 13 |
| 48 | 8.834 0865 | 8.835 9293 | 8.837 7643 | 8.839 5916 | 8.841 4111 | 8.843 2230 | 12 |
| 49 | 8.834 1173 | 8.835 9600 | 8.837 7948 | 8.839 6220 | 8.841 4414 | 8.843 2532 | 11 |
| 50 | 8.834 1481 | 8.835 9906 | 8.837 8254 | 8.839 6523 | 8.841 4716 | 8.843 2833 | 10 |
| 51 | 8.834 1788 | 8.836 0213 | 8.837 8559 | 8.839 6827 | 8.841 5019 | 8.843 3134 | 9  |
| 52 | 8.834 2096 | 8.836 0519 | 8.837 8864 | 8.839 7131 | 8.841 5322 | 8.843 3436 | 8  |
| 53 | 8.834 2404 | 8.836 0825 | 8.837 9169 | 8.839 7435 | 8.841 5624 | 8.843 3737 | 7  |
| 54 | 8.834 2711 | 8.836 1132 | 8.837 9474 | 8.839 7739 | 8.841 5927 | 8.843 4038 | 6  |
| 55 | 8.834 3019 | 8.836 1438 | 8.837 9779 | 8.839 8042 | 8.841 6229 | 8.843 4339 | 5  |
| 56 | 8.834 3327 | 8.836 1744 | 8.838 0084 | 8.839 8346 | 8.841 6531 | 8.843 4641 | 4  |
| 57 | 8.834 3634 | 8.836 2051 | 8.838 0389 | 8.839 8650 | 8.841 6834 | 8.843 4942 | 3  |
| 58 | 8.834 3942 | 8.836 2357 | 8.838 0694 | 8.839 8954 | 8.841 7136 | 8.843 5243 | 2  |
| 59 | 8.834 4249 | 8.836 2663 | 8.838 0999 | 8.839 9257 | 8.841 7439 | 8.843 5544 | 1  |
| 60 | 8.834 4557 | 8.836 2969 | 8.838 1304 | 8.839 9561 | 8.841 7741 | 8.843 5845 | 0  |
| "  | 5'         | 4'         | 3'         | 2'         | 1'         | 0'         | "  |



| "  | 54'        | 55'        | 56'        | 57'        | 58'        | 59'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.833 6134 | 8.835 4712 | 8.837 3211 | 8.839 1633 | 8.840 9977 | 8.842 8245 | 60 |
| 1  | 8.833 6445 | 8.835 5021 | 8.837 3519 | 8.839 1939 | 8.841 0282 | 8.842 8549 | 59 |
| 2  | 8.833 6755 | 8.835 5330 | 8.837 3826 | 8.839 2245 | 8.841 0587 | 8.842 8853 | 58 |
| 3  | 8.833 7065 | 8.835 5639 | 8.837 4134 | 8.839 2552 | 8.841 0892 | 8.842 9156 | 57 |
| 4  | 8.833 7375 | 8.835 5948 | 8.837 4442 | 8.839 2858 | 8.841 1197 | 8.842 9460 | 56 |
| 5  | 8.833 7685 | 8.835 6257 | 8.837 4749 | 8.839 3164 | 8.841 1502 | 8.842 9764 | 55 |
| 6  | 8.833 7996 | 8.835 6565 | 8.837 5057 | 8.839 3471 | 8.841 1807 | 8.843 0068 | 54 |
| 7  | 8.833 8306 | 8.835 6874 | 8.837 5364 | 8.839 3777 | 8.841 2112 | 8.843 0371 | 53 |
| 8  | 8.833 8616 | 8.835 7183 | 8.837 5672 | 8.839 4083 | 8.841 2417 | 8.843 0675 | 52 |
| 9  | 8.833 8926 | 8.835 7492 | 8.837 5979 | 8.839 4389 | 8.841 2722 | 8.843 0979 | 51 |
| 10 | 8.833 9236 | 8.835 7801 | 8.837 6287 | 8.839 4695 | 8.841 3027 | 8.843 1282 | 50 |
| 11 | 8.833 9546 | 8.835 8109 | 8.837 6594 | 8.839 5002 | 8.841 3332 | 8.843 1586 | 49 |
| 12 | 8.833 9856 | 8.835 8418 | 8.837 6902 | 8.839 5308 | 8.841 3637 | 8.843 1890 | 48 |
| 13 | 8.834 0166 | 8.835 8727 | 8.837 7209 | 8.839 5614 | 8.841 3942 | 8.843 2193 | 47 |
| 14 | 8.834 0476 | 8.835 9035 | 8.837 7516 | 8.839 5920 | 8.841 4246 | 8.843 2497 | 46 |
| 15 | 8.834 0786 | 8.835 9344 | 8.837 7824 | 8.839 6226 | 8.841 4551 | 8.843 2800 | 45 |
| 16 | 8.834 1096 | 8.835 9653 | 8.837 8131 | 8.839 6532 | 8.841 4856 | 8.843 3104 | 44 |
| 17 | 8.834 1406 | 8.835 9961 | 8.837 8438 | 8.839 6838 | 8.841 5161 | 8.843 3407 | 43 |
| 18 | 8.834 1716 | 8.836 0270 | 8.837 8746 | 8.839 7144 | 8.841 5465 | 8.843 3711 | 42 |
| 19 | 8.834 2026 | 8.836 0578 | 8.837 9053 | 8.839 7450 | 8.841 5770 | 8.843 4014 | 41 |
| 20 | 8.834 2336 | 8.836 0887 | 8.837 9360 | 8.839 7756 | 8.841 6075 | 8.843 4318 | 40 |
| 21 | 8.834 2645 | 8.836 1196 | 8.837 9667 | 8.839 8062 | 8.841 6380 | 8.843 4621 | 39 |
| 22 | 8.834 2955 | 8.836 1504 | 8.837 9975 | 8.839 8368 | 8.841 6684 | 8.843 4924 | 38 |
| 23 | 8.834 3265 | 8.836 1813 | 8.838 0282 | 8.839 8674 | 8.841 6989 | 8.843 5228 | 37 |
| 24 | 8.834 3575 | 8.836 2121 | 8.838 0589 | 8.839 8980 | 8.841 7293 | 8.843 5531 | 36 |
| 25 | 8.834 3885 | 8.836 2429 | 8.838 0896 | 8.839 9285 | 8.841 7598 | 8.843 5834 | 35 |
| 26 | 8.834 4194 | 8.836 2738 | 8.838 1203 | 8.839 9591 | 8.841 7903 | 8.843 6138 | 34 |
| 27 | 8.834 4504 | 8.836 3046 | 8.838 1510 | 8.839 9897 | 8.841 8207 | 8.843 6441 | 33 |
| 28 | 8.834 4814 | 8.836 3355 | 8.838 1817 | 8.840 0203 | 8.841 8512 | 8.843 6744 | 32 |
| 29 | 8.834 5123 | 8.836 3663 | 8.838 2125 | 8.840 0509 | 8.841 8816 | 8.843 7047 | 31 |
| 30 | 8.834 5433 | 8.836 3971 | 8.838 2432 | 8.840 0814 | 8.841 9121 | 8.843 7351 | 30 |
| 31 | 8.834 5743 | 8.836 4280 | 8.838 2739 | 8.840 1120 | 8.841 9425 | 8.843 7654 | 29 |
| 32 | 8.834 6052 | 8.836 4588 | 8.838 3046 | 8.840 1426 | 8.841 9729 | 8.843 7957 | 28 |
| 33 | 8.834 6362 | 8.836 4896 | 8.838 3353 | 8.840 1732 | 8.842 0034 | 8.843 8260 | 27 |
| 34 | 8.834 6671 | 8.836 5204 | 8.838 3659 | 8.840 2037 | 8.842 0338 | 8.843 8563 | 26 |
| 35 | 8.834 6981 | 8.836 5513 | 8.838 3966 | 8.840 2343 | 8.842 0643 | 8.843 8866 | 25 |
| 36 | 8.834 7290 | 8.836 5821 | 8.838 4273 | 8.840 2649 | 8.842 0947 | 8.843 9169 | 24 |
| 37 | 8.834 7600 | 8.836 6129 | 8.838 4580 | 8.840 2954 | 8.842 1251 | 8.843 9473 | 23 |
| 38 | 8.834 7909 | 8.836 6437 | 8.838 4887 | 8.840 3260 | 8.842 1556 | 8.843 9776 | 22 |
| 39 | 8.834 8219 | 8.836 6745 | 8.838 5194 | 8.840 3565 | 8.842 1860 | 8.844 0079 | 21 |
| 40 | 8.834 8528 | 8.836 7053 | 8.838 5501 | 8.840 3871 | 8.842 2164 | 8.844 0382 | 20 |
| 41 | 8.834 8838 | 8.836 7361 | 8.838 5808 | 8.840 4176 | 8.842 2468 | 8.844 0685 | 19 |
| 42 | 8.834 9147 | 8.836 7670 | 8.838 6114 | 8.840 4482 | 8.842 2773 | 8.844 0988 | 18 |
| 43 | 8.834 9456 | 8.836 7978 | 8.838 6421 | 8.840 4787 | 8.842 3077 | 8.844 1290 | 17 |
| 44 | 8.834 9766 | 8.836 8286 | 8.838 6728 | 8.840 5093 | 8.842 3381 | 8.844 1593 | 16 |
| 45 | 8.835 0075 | 8.836 8594 | 8.838 7035 | 8.840 5398 | 8.842 3685 | 8.844 1896 | 15 |
| 46 | 8.835 0384 | 8.836 8902 | 8.838 7341 | 8.840 5704 | 8.842 3989 | 8.844 2199 | 14 |
| 47 | 8.835 0693 | 8.836 9210 | 8.838 7648 | 8.840 6009 | 8.842 4293 | 8.844 2502 | 13 |
| 48 | 8.835 1003 | 8.836 9518 | 8.838 7955 | 8.840 6314 | 8.842 4598 | 8.844 2805 | 12 |
| 49 | 8.835 1312 | 8.836 9825 | 8.838 8261 | 8.840 6620 | 8.842 4902 | 8.844 3108 | 11 |
| 50 | 8.835 1621 | 8.837 0133 | 8.838 8568 | 8.840 6925 | 8.842 5206 | 8.844 3410 | 10 |
| 51 | 8.835 1930 | 8.837 0441 | 8.838 8874 | 8.840 7230 | 8.842 5510 | 8.844 3713 | 9  |
| 52 | 8.835 2239 | 8.837 0749 | 8.838 9181 | 8.840 7536 | 8.842 5814 | 8.844 4016 | 8  |
| 53 | 8.835 2549 | 8.837 1057 | 8.838 9487 | 8.840 7841 | 8.842 6118 | 8.844 4319 | 7  |
| 54 | 8.835 2858 | 8.837 1365 | 8.838 9794 | 8.840 8146 | 8.842 6422 | 8.844 4621 | 6  |
| 55 | 8.835 3167 | 8.837 1673 | 8.839 0100 | 8.840 8451 | 8.842 6726 | 8.844 4924 | 5  |
| 56 | 8.835 3476 | 8.837 1980 | 8.839 0407 | 8.840 8756 | 8.842 7030 | 8.844 5227 | 4  |
| 57 | 8.835 3785 | 8.837 2288 | 8.839 0713 | 8.840 9062 | 8.842 7333 | 8.844 5529 | 3  |
| 58 | 8.835 4094 | 8.837 2596 | 8.839 1020 | 8.840 9367 | 8.842 7637 | 8.844 5832 | 2  |
| 59 | 8.835 4403 | 8.837 2903 | 8.839 1326 | 8.840 9672 | 8.842 7941 | 8.844 6135 | 1  |
| 60 | 8.835 4712 | 8.837 3211 | 8.839 1633 | 8.840 9977 | 8.842 8245 | 8.844 6437 | 0  |
| "  | 5'         | 4'         | 3'         | 2'         | 1'         | 0'         | "  |



| "  | 0'         | 1'         | 2'         | 3'         | 4'         | 5'         | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.843 5845 | 8.845 3824 | 8.847 1802 | 8.848 9781 | 8.850 7760 | 8.852 5739 | 60 |
| 1  | 8.843 6146 | 8.845 4124 | 8.847 2103 | 8.849 0082 | 8.850 8061 | 8.852 6040 | 59 |
| 2  | 8.843 6447 | 8.845 4425 | 8.847 2404 | 8.849 0383 | 8.850 8362 | 8.852 6341 | 58 |
| 3  | 8.843 6748 | 8.845 4726 | 8.847 2705 | 8.849 0684 | 8.850 8663 | 8.852 6642 | 57 |
| 4  | 8.843 7049 | 8.845 5027 | 8.847 3006 | 8.849 0985 | 8.850 8964 | 8.852 6943 | 56 |
| 5  | 8.843 7350 | 8.845 5328 | 8.847 3307 | 8.849 1286 | 8.850 9265 | 8.852 7244 | 55 |
| 6  | 8.843 7651 | 8.845 5629 | 8.847 3608 | 8.849 1587 | 8.850 9566 | 8.852 7545 | 54 |
| 7  | 8.843 7952 | 8.845 5930 | 8.847 3909 | 8.849 1888 | 8.850 9867 | 8.852 7846 | 53 |
| 8  | 8.843 8253 | 8.845 6231 | 8.847 4210 | 8.849 2189 | 8.851 0168 | 8.852 8147 | 52 |
| 9  | 8.843 8554 | 8.845 6532 | 8.847 4511 | 8.849 2490 | 8.851 0469 | 8.852 8448 | 51 |
| 10 | 8.843 8855 | 8.845 6833 | 8.847 4812 | 8.849 2791 | 8.851 0770 | 8.852 8749 | 50 |
| 11 | 8.843 9156 | 8.845 7134 | 8.847 5113 | 8.849 3092 | 8.851 1071 | 8.852 9050 | 49 |
| 12 | 8.843 9457 | 8.845 7435 | 8.847 5414 | 8.849 3393 | 8.851 1372 | 8.852 9351 | 48 |
| 13 | 8.843 9758 | 8.845 7736 | 8.847 5715 | 8.849 3694 | 8.851 1673 | 8.852 9652 | 47 |
| 14 | 8.844 0059 | 8.845 8037 | 8.847 6016 | 8.849 3995 | 8.851 1974 | 8.852 9953 | 46 |
| 15 | 8.844 0360 | 8.845 8338 | 8.847 6317 | 8.849 4296 | 8.851 2275 | 8.853 0254 | 45 |
| 16 | 8.844 0661 | 8.845 8639 | 8.847 6618 | 8.849 4597 | 8.851 2576 | 8.853 0555 | 44 |
| 17 | 8.844 0962 | 8.845 8940 | 8.847 6919 | 8.849 4898 | 8.851 2877 | 8.853 0856 | 43 |
| 18 | 8.844 1263 | 8.845 9241 | 8.847 7220 | 8.849 5199 | 8.851 3178 | 8.853 1157 | 42 |
| 19 | 8.844 1564 | 8.845 9542 | 8.847 7521 | 8.849 5500 | 8.851 3479 | 8.853 1458 | 41 |
| 20 | 8.844 1865 | 8.845 9843 | 8.847 7822 | 8.849 5801 | 8.851 3780 | 8.853 1759 | 40 |
| 21 | 8.844 2166 | 8.846 0144 | 8.847 8123 | 8.849 6102 | 8.851 4081 | 8.853 2060 | 39 |
| 22 | 8.844 2467 | 8.846 0445 | 8.847 8424 | 8.849 6403 | 8.851 4382 | 8.853 2361 | 38 |
| 23 | 8.844 2768 | 8.846 0746 | 8.847 8725 | 8.849 6704 | 8.851 4683 | 8.853 2662 | 37 |
| 24 | 8.844 3069 | 8.846 1047 | 8.847 9026 | 8.849 7005 | 8.851 4984 | 8.853 2963 | 36 |
| 25 | 8.844 3370 | 8.846 1348 | 8.847 9327 | 8.849 7306 | 8.851 5285 | 8.853 3264 | 35 |
| 26 | 8.844 3671 | 8.846 1649 | 8.847 9628 | 8.849 7607 | 8.851 5586 | 8.853 3565 | 34 |
| 27 | 8.844 3972 | 8.846 1950 | 8.847 9929 | 8.849 7908 | 8.851 5887 | 8.853 3866 | 33 |
| 28 | 8.844 4273 | 8.846 2251 | 8.848 0230 | 8.849 8209 | 8.851 6188 | 8.853 4167 | 32 |
| 29 | 8.844 4574 | 8.846 2552 | 8.848 0531 | 8.849 8510 | 8.851 6489 | 8.853 4468 | 31 |
| 30 | 8.844 4875 | 8.846 2853 | 8.848 0832 | 8.849 8811 | 8.851 6790 | 8.853 4769 | 30 |
| 31 | 8.844 5176 | 8.846 3154 | 8.848 1133 | 8.849 9112 | 8.851 7091 | 8.853 5070 | 29 |
| 32 | 8.844 5477 | 8.846 3455 | 8.848 1434 | 8.849 9413 | 8.851 7392 | 8.853 5371 | 28 |
| 33 | 8.844 5778 | 8.846 3756 | 8.848 1735 | 8.849 9714 | 8.851 7693 | 8.853 5672 | 27 |
| 34 | 8.844 6079 | 8.846 4057 | 8.848 2036 | 8.849 1015 | 8.851 7994 | 8.853 5973 | 26 |
| 35 | 8.844 6380 | 8.846 4358 | 8.848 2337 | 8.849 1316 | 8.851 8295 | 8.853 6274 | 25 |
| 36 | 8.844 6681 | 8.846 4659 | 8.848 2638 | 8.849 1617 | 8.851 8596 | 8.853 6575 | 24 |
| 37 | 8.844 6982 | 8.846 4960 | 8.848 2939 | 8.849 1918 | 8.851 8897 | 8.853 6876 | 23 |
| 38 | 8.844 7283 | 8.846 5261 | 8.848 3240 | 8.849 2219 | 8.851 9198 | 8.853 7177 | 22 |
| 39 | 8.844 7584 | 8.846 5562 | 8.848 3541 | 8.849 2520 | 8.851 9499 | 8.853 7478 | 21 |
| 40 | 8.844 7885 | 8.846 5863 | 8.848 3842 | 8.849 2821 | 8.851 9800 | 8.853 7779 | 20 |
| 41 | 8.844 8186 | 8.846 6164 | 8.848 4143 | 8.849 3122 | 8.852 0101 | 8.853 8080 | 19 |
| 42 | 8.844 8487 | 8.846 6465 | 8.848 4444 | 8.849 3423 | 8.852 0402 | 8.853 8381 | 18 |
| 43 | 8.844 8788 | 8.846 6766 | 8.848 4745 | 8.849 3724 | 8.852 0703 | 8.853 8682 | 17 |
| 44 | 8.844 9089 | 8.846 7067 | 8.848 5046 | 8.849 4025 | 8.852 1004 | 8.853 8983 | 16 |
| 45 | 8.844 9390 | 8.846 7368 | 8.848 5347 | 8.849 4326 | 8.852 1305 | 8.853 9284 | 15 |
| 46 | 8.844 9691 | 8.846 7669 | 8.848 5648 | 8.849 4627 | 8.852 1606 | 8.853 9585 | 14 |
| 47 | 8.844 9992 | 8.846 7970 | 8.848 5949 | 8.849 4928 | 8.852 1907 | 8.853 9886 | 13 |
| 48 | 8.845 0293 | 8.846 8271 | 8.848 6250 | 8.849 5229 | 8.852 2208 | 8.854 0187 | 12 |
| 49 | 8.845 0594 | 8.846 8572 | 8.848 6551 | 8.849 5530 | 8.852 2509 | 8.854 0488 | 11 |
| 50 | 8.845 0895 | 8.846 8873 | 8.848 6852 | 8.849 5831 | 8.852 2810 | 8.854 0789 | 10 |
| 51 | 8.845 1196 | 8.846 9174 | 8.848 7153 | 8.849 6132 | 8.852 3111 | 8.854 1090 | 9  |
| 52 | 8.845 1497 | 8.846 9475 | 8.848 7454 | 8.849 6433 | 8.852 3412 | 8.854 1391 | 8  |
| 53 | 8.845 1798 | 8.846 9776 | 8.848 7755 | 8.849 6734 | 8.852 3713 | 8.854 1692 | 7  |
| 54 | 8.845 2099 | 8.847 0077 | 8.848 8056 | 8.849 7035 | 8.852 4014 | 8.854 1993 | 6  |
| 55 | 8.845 2399 | 8.847 0378 | 8.848 8357 | 8.849 7336 | 8.852 4315 | 8.854 2294 | 5  |
| 56 | 8.845 2700 | 8.847 0679 | 8.848 8658 | 8.849 7637 | 8.852 4616 | 8.854 2595 | 4  |
| 57 | 8.845 3001 | 8.847 0980 | 8.848 8959 | 8.849 7938 | 8.852 4917 | 8.854 2896 | 3  |
| 58 | 8.845 3302 | 8.847 1281 | 8.848 9260 | 8.849 8239 | 8.852 5218 | 8.854 3197 | 2  |
| 59 | 8.845 3603 | 8.847 1582 | 8.848 9561 | 8.849 8540 | 8.852 5519 | 8.854 3498 | 1  |
| 60 | 8.845 3904 | 8.847 1883 | 8.848 9862 | 8.849 8841 | 8.852 5820 | 8.854 3799 | 0  |
| "  | 50'        | 58'        | 57'        | 56'        | 55'        | 54'        | "  |



| "  | 0'         | 1'         | 2'         | 3'         | 4'         | 5'         | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.844 6437 | 8.846 4554 | 8.848 2597 | 8.850 0566 | 8.851 8461 | 8.853 6283 | 60 |
| 1  | 8.844 6740 | 8.846 4856 | 8.848 2897 | 8.850 0864 | 8.851 8758 | 8.853 6580 | 59 |
| 2  | 8.844 7042 | 8.846 5157 | 8.848 3197 | 8.850 1163 | 8.851 9056 | 8.853 6876 | 58 |
| 3  | 8.844 7345 | 8.846 5458 | 8.848 3497 | 8.850 1462 | 8.851 9354 | 8.853 7173 | 57 |
| 4  | 8.844 7647 | 8.846 5759 | 8.848 3797 | 8.850 1761 | 8.851 9651 | 8.853 7469 | 56 |
| 5  | 8.844 7950 | 8.846 6061 | 8.848 4097 | 8.850 2060 | 8.851 9949 | 8.853 7765 | 55 |
| 6  | 8.844 8252 | 8.846 6362 | 8.848 4397 | 8.850 2358 | 8.852 0246 | 8.853 8062 | 54 |
| 7  | 8.844 8555 | 8.846 6663 | 8.848 4697 | 8.850 2657 | 8.852 0544 | 8.853 8358 | 53 |
| 8  | 8.844 8857 | 8.846 6964 | 8.848 4997 | 8.850 2956 | 8.852 0841 | 8.853 8654 | 52 |
| 9  | 8.844 9160 | 8.846 7265 | 8.848 5297 | 8.850 3254 | 8.852 1139 | 8.853 8951 | 51 |
| 10 | 8.844 9462 | 8.846 7567 | 8.848 5597 | 8.850 3553 | 8.852 1436 | 8.853 9247 | 50 |
| 11 | 8.844 9764 | 8.846 7868 | 8.848 5897 | 8.850 3852 | 8.852 1734 | 8.853 9543 | 49 |
| 12 | 8.845 0067 | 8.846 8169 | 8.848 6197 | 8.850 4150 | 8.852 2031 | 8.853 9839 | 48 |
| 13 | 8.845 0369 | 8.846 8470 | 8.848 6496 | 8.850 4449 | 8.852 2329 | 8.854 0135 | 47 |
| 14 | 8.845 0671 | 8.846 8771 | 8.848 6796 | 8.850 4748 | 8.852 2626 | 8.854 0432 | 46 |
| 15 | 8.845 0974 | 8.846 9072 | 8.848 7096 | 8.850 5046 | 8.852 2923 | 8.854 0728 | 45 |
| 16 | 8.845 1276 | 8.846 9373 | 8.848 7396 | 8.850 5345 | 8.852 3221 | 8.854 1024 | 44 |
| 17 | 8.845 1578 | 8.846 9674 | 8.848 7695 | 8.850 5643 | 8.852 3518 | 8.854 1320 | 43 |
| 18 | 8.845 1880 | 8.846 9975 | 8.848 7995 | 8.850 5942 | 8.852 3815 | 8.854 1616 | 42 |
| 19 | 8.845 2182 | 8.847 0276 | 8.848 8295 | 8.850 6240 | 8.852 4112 | 8.854 1912 | 41 |
| 20 | 8.845 2485 | 8.847 0577 | 8.848 8595 | 8.850 6539 | 8.852 4410 | 8.854 2208 | 40 |
| 21 | 8.845 2787 | 8.847 0878 | 8.848 8894 | 8.850 6837 | 8.852 4707 | 8.854 2504 | 39 |
| 22 | 8.845 3089 | 8.847 1179 | 8.848 9194 | 8.850 7136 | 8.852 5004 | 8.854 2800 | 38 |
| 23 | 8.845 3391 | 8.847 1479 | 8.848 9494 | 8.850 7434 | 8.852 5301 | 8.854 3096 | 37 |
| 24 | 8.845 3693 | 8.847 1780 | 8.848 9793 | 8.850 7732 | 8.852 5599 | 8.854 3392 | 36 |
| 25 | 8.845 3995 | 8.847 2081 | 8.849 0093 | 8.850 8031 | 8.852 5896 | 8.854 3688 | 35 |
| 26 | 8.845 4297 | 8.847 2382 | 8.849 0392 | 8.850 8329 | 8.852 6193 | 8.854 3984 | 34 |
| 27 | 8.845 4599 | 8.847 2683 | 8.849 0692 | 8.850 8627 | 8.852 6490 | 8.854 4280 | 33 |
| 28 | 8.845 4901 | 8.847 2983 | 8.849 0991 | 8.850 8926 | 8.852 6787 | 8.854 4576 | 32 |
| 29 | 8.845 5203 | 8.847 3284 | 8.849 1291 | 8.850 9224 | 8.852 7084 | 8.854 4872 | 31 |
| 30 | 8.845 5505 | 8.847 3585 | 8.849 1590 | 8.850 9522 | 8.852 7381 | 8.854 5168 | 30 |
| 31 | 8.845 5807 | 8.847 3886 | 8.849 1890 | 8.850 9821 | 8.852 7678 | 8.854 5464 | 29 |
| 32 | 8.845 6109 | 8.847 4186 | 8.849 2189 | 8.851 0119 | 8.852 7975 | 8.854 5759 | 28 |
| 33 | 8.845 6411 | 8.847 4487 | 8.849 2489 | 8.851 0417 | 8.852 8272 | 8.854 6055 | 27 |
| 34 | 8.845 6713 | 8.847 4788 | 8.849 2788 | 8.851 0715 | 8.852 8569 | 8.854 6351 | 26 |
| 35 | 8.845 7015 | 8.847 5088 | 8.849 3088 | 8.851 1013 | 8.852 8866 | 8.854 6647 | 25 |
| 36 | 8.845 7317 | 8.847 5389 | 8.849 3387 | 8.851 1311 | 8.852 9163 | 8.854 6942 | 24 |
| 37 | 8.845 7618 | 8.847 5689 | 8.849 3686 | 8.851 1610 | 8.852 9460 | 8.854 7238 | 23 |
| 38 | 8.845 7920 | 8.847 5990 | 8.849 3986 | 8.851 1908 | 8.852 9757 | 8.854 7534 | 22 |
| 39 | 8.845 8222 | 8.847 6290 | 8.849 4285 | 8.851 2206 | 8.853 0054 | 8.854 7829 | 21 |
| 40 | 8.845 8524 | 8.847 6591 | 8.849 4584 | 8.851 2504 | 8.853 0351 | 8.854 8125 | 20 |
| 41 | 8.845 8825 | 8.847 6891 | 8.849 4883 | 8.851 2802 | 8.853 0647 | 8.854 8421 | 19 |
| 42 | 8.845 9127 | 8.847 7192 | 8.849 5183 | 8.851 3100 | 8.853 0944 | 8.854 8716 | 18 |
| 43 | 8.845 9429 | 8.847 7492 | 8.849 5482 | 8.851 3398 | 8.853 1241 | 8.854 9012 | 17 |
| 44 | 8.845 9730 | 8.847 7793 | 8.849 5781 | 8.851 3696 | 8.853 1538 | 8.854 9308 | 16 |
| 45 | 8.846 0032 | 8.847 8093 | 8.849 6080 | 8.851 3994 | 8.853 1835 | 8.854 9603 | 15 |
| 46 | 8.846 0334 | 8.847 8394 | 8.849 6379 | 8.851 4292 | 8.853 2131 | 8.854 9899 | 14 |
| 47 | 8.846 0635 | 8.847 8694 | 8.849 6679 | 8.851 4590 | 8.853 2428 | 8.855 0194 | 13 |
| 48 | 8.846 0937 | 8.847 8994 | 8.849 6978 | 8.851 4888 | 8.853 2725 | 8.855 0490 | 12 |
| 49 | 8.846 1238 | 8.847 9295 | 8.849 7277 | 8.851 5185 | 8.853 3021 | 8.855 0785 | 11 |
| 50 | 8.846 1540 | 8.847 9595 | 8.849 7576 | 8.851 5483 | 8.853 3318 | 8.855 1081 | 10 |
| 51 | 8.846 1842 | 8.847 9895 | 8.849 7875 | 8.851 5781 | 8.853 3615 | 8.855 1376 | 9  |
| 52 | 8.846 2143 | 8.848 0195 | 8.849 8174 | 8.851 6079 | 8.853 3911 | 8.855 1671 | 8  |
| 53 | 8.846 2445 | 8.848 0496 | 8.849 8473 | 8.851 6377 | 8.853 4208 | 8.855 1967 | 7  |
| 54 | 8.846 2746 | 8.848 0796 | 8.849 8772 | 8.851 6675 | 8.853 4504 | 8.855 2262 | 6  |
| 55 | 8.846 3047 | 8.848 1096 | 8.849 9071 | 8.851 6972 | 8.853 4801 | 8.855 2557 | 5  |
| 56 | 8.846 3349 | 8.848 1396 | 8.849 9370 | 8.851 7270 | 8.853 5098 | 8.855 2853 | 4  |
| 57 | 8.846 3650 | 8.848 1697 | 8.849 9669 | 8.851 7568 | 8.853 5394 | 8.855 3148 | 3  |
| 58 | 8.846 3952 | 8.848 1997 | 8.849 9968 | 8.851 7865 | 8.853 5691 | 8.855 3443 | 2  |
| 59 | 8.846 4253 | 8.848 2297 | 8.850 0267 | 8.851 8163 | 8.853 5987 | 8.855 3739 | 1  |
| 60 | 8.846 4554 | 8.848 2597 | 8.850 0566 | 8.851 8461 | 8.853 6283 | 8.855 4034 | 0  |
| "  | 59'        | 58'        | 57'        | 56'        | 55'        | 54'        | "  |



| "  | 6'         | 7'         | 8'         | 9'         | 10'        | 11'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.854 2905 | 8.856 0493 | 8.857 8010 | 8.859 5457 | 8.861 2833 | 8.863 0139 | 60 |
| 1  | 8.854 3199 | 8.856 0786 | 8.857 8302 | 8.859 5747 | 8.861 3122 | 8.863 0427 | 59 |
| 2  | 8.854 3493 | 8.856 1078 | 8.857 8593 | 8.859 6037 | 8.861 3411 | 8.863 0715 | 58 |
| 3  | 8.854 3786 | 8.856 1371 | 8.857 8884 | 8.859 6327 | 8.861 3700 | 8.863 1003 | 57 |
| 4  | 8.854 4080 | 8.856 1663 | 8.857 9176 | 8.859 6617 | 8.861 3989 | 8.863 1290 | 56 |
| 5  | 8.854 4374 | 8.856 1956 | 8.857 9467 | 8.859 6907 | 8.861 4277 | 8.863 1578 | 55 |
| 6  | 8.854 4667 | 8.856 2248 | 8.857 9758 | 8.859 7197 | 8.861 4566 | 8.863 1866 | 54 |
| 7  | 8.854 4961 | 8.856 2541 | 8.858 0049 | 8.859 7487 | 8.861 4855 | 8.863 2154 | 53 |
| 8  | 8.854 5254 | 8.856 2833 | 8.858 0341 | 8.859 7777 | 8.861 5144 | 8.863 2441 | 52 |
| 9  | 8.854 5548 | 8.856 3126 | 8.858 0632 | 8.859 8067 | 8.861 5433 | 8.863 2729 | 51 |
| 10 | 8.854 5842 | 8.856 3418 | 8.858 0923 | 8.859 8357 | 8.861 5722 | 8.863 3017 | 50 |
| 11 | 8.854 6135 | 8.856 3710 | 8.858 1214 | 8.859 8647 | 8.861 6011 | 8.863 3304 | 49 |
| 12 | 8.854 6429 | 8.856 4003 | 8.858 1505 | 8.859 8937 | 8.861 6299 | 8.863 3592 | 48 |
| 13 | 8.854 6722 | 8.856 4295 | 8.858 1796 | 8.859 9227 | 8.861 6588 | 8.863 3880 | 47 |
| 14 | 8.854 7016 | 8.856 4587 | 8.858 2087 | 8.859 9517 | 8.861 6877 | 8.863 4167 | 46 |
| 15 | 8.854 7309 | 8.856 4879 | 8.858 2379 | 8.859 9807 | 8.861 7166 | 8.863 4455 | 45 |
| 16 | 8.854 7602 | 8.856 5172 | 8.858 2670 | 8.860 0097 | 8.861 7454 | 8.863 4742 | 44 |
| 17 | 8.854 7896 | 8.856 5464 | 8.858 2961 | 8.860 0387 | 8.861 7743 | 8.863 5030 | 43 |
| 18 | 8.854 8189 | 8.856 5756 | 8.858 3252 | 8.860 0677 | 8.861 8032 | 8.863 5318 | 42 |
| 19 | 8.854 8483 | 8.856 6048 | 8.858 3543 | 8.860 0967 | 8.861 8321 | 8.863 5605 | 41 |
| 20 | 8.854 8776 | 8.856 6340 | 8.858 3834 | 8.860 1256 | 8.861 8609 | 8.863 5893 | 40 |
| 21 | 8.854 9069 | 8.856 6632 | 8.858 4125 | 8.860 1546 | 8.861 8898 | 8.863 6180 | 39 |
| 22 | 8.854 9363 | 8.856 6925 | 8.858 4416 | 8.860 1836 | 8.861 9186 | 8.863 6467 | 38 |
| 23 | 8.854 9656 | 8.856 7217 | 8.858 4706 | 8.860 2126 | 8.861 9475 | 8.863 6755 | 37 |
| 24 | 8.854 9949 | 8.856 7509 | 8.858 4997 | 8.860 2415 | 8.861 9764 | 8.863 7042 | 36 |
| 25 | 8.855 0242 | 8.856 7801 | 8.858 5288 | 8.860 2705 | 8.862 0052 | 8.863 7330 | 35 |
| 26 | 8.855 0536 | 8.856 8093 | 8.858 5579 | 8.860 2995 | 8.862 0341 | 8.863 7617 | 34 |
| 27 | 8.855 0829 | 8.856 8385 | 8.858 5870 | 8.860 3284 | 8.862 0629 | 8.863 7904 | 33 |
| 28 | 8.855 1122 | 8.856 8677 | 8.858 6161 | 8.860 3574 | 8.862 0918 | 8.863 8192 | 32 |
| 29 | 8.855 1415 | 8.856 8969 | 8.858 6452 | 8.860 3864 | 8.862 1206 | 8.863 8479 | 31 |
| 30 | 8.855 1708 | 8.856 9261 | 8.858 6742 | 8.860 4153 | 8.862 1495 | 8.863 8766 | 30 |
| 31 | 8.855 2001 | 8.856 9553 | 8.858 7033 | 8.860 4443 | 8.862 1783 | 8.863 9054 | 29 |
| 32 | 8.855 2294 | 8.856 9845 | 8.858 7324 | 8.860 4733 | 8.862 2071 | 8.863 9341 | 28 |
| 33 | 8.855 2588 | 8.857 0137 | 8.858 7615 | 8.860 5022 | 8.862 2360 | 8.863 9628 | 27 |
| 34 | 8.855 2881 | 8.857 0428 | 8.858 7905 | 8.860 5312 | 8.862 2648 | 8.863 9915 | 26 |
| 35 | 8.855 3174 | 8.857 0720 | 8.858 8196 | 8.860 5601 | 8.862 2936 | 8.864 0203 | 25 |
| 36 | 8.855 3467 | 8.857 1012 | 8.858 8487 | 8.860 5891 | 8.862 3225 | 8.864 0490 | 24 |
| 37 | 8.855 3760 | 8.857 1304 | 8.858 8777 | 8.860 6180 | 8.862 3513 | 8.864 0777 | 23 |
| 38 | 8.855 4053 | 8.857 1596 | 8.858 9068 | 8.860 6470 | 8.862 3801 | 8.864 1064 | 22 |
| 39 | 8.855 4346 | 8.857 1888 | 8.858 9358 | 8.860 6759 | 8.862 4090 | 8.864 1351 | 21 |
| 40 | 8.855 4639 | 8.857 2179 | 8.858 9649 | 8.860 7048 | 8.862 4378 | 8.864 1638 | 20 |
| 41 | 8.855 4932 | 8.857 2471 | 8.858 9940 | 8.860 7338 | 8.862 4666 | 8.864 1925 | 19 |
| 42 | 8.855 5224 | 8.857 2763 | 8.859 0230 | 8.860 7627 | 8.862 4954 | 8.864 2212 | 18 |
| 43 | 8.855 5517 | 8.857 3054 | 8.859 0521 | 8.860 7917 | 8.862 5243 | 8.864 2500 | 17 |
| 44 | 8.855 5810 | 8.857 3346 | 8.859 0812 | 8.860 8206 | 8.862 5531 | 8.864 2787 | 16 |
| 45 | 8.855 6103 | 8.857 3638 | 8.859 1102 | 8.860 8495 | 8.862 5819 | 8.864 3074 | 15 |
| 46 | 8.855 6396 | 8.857 3929 | 8.859 1392 | 8.860 8784 | 8.862 6107 | 8.864 3361 | 14 |
| 47 | 8.855 6689 | 8.857 4221 | 8.859 1683 | 8.860 9074 | 8.862 6395 | 8.864 3648 | 13 |
| 48 | 8.855 6982 | 8.857 4513 | 8.859 1973 | 8.860 9363 | 8.862 6683 | 8.864 3934 | 12 |
| 49 | 8.855 7274 | 8.857 4804 | 8.859 2263 | 8.860 9652 | 8.862 6971 | 8.864 4221 | 11 |
| 50 | 8.855 7567 | 8.857 5096 | 8.859 2554 | 8.860 9941 | 8.862 7259 | 8.864 4508 | 10 |
| 51 | 8.855 7860 | 8.857 5387 | 8.859 2844 | 8.861 0231 | 8.862 7548 | 8.864 4795 | 9  |
| 52 | 8.855 8152 | 8.857 5679 | 8.859 3135 | 8.861 0520 | 8.862 7836 | 8.864 5082 | 8  |
| 53 | 8.855 8445 | 8.857 5970 | 8.859 3425 | 8.861 0809 | 8.862 8124 | 8.864 5369 | 7  |
| 54 | 8.855 8738 | 8.857 6262 | 8.859 3715 | 8.861 1098 | 8.862 8412 | 8.864 5656 | 6  |
| 55 | 8.855 9030 | 8.857 6553 | 8.859 4005 | 8.861 1387 | 8.862 8700 | 8.864 5943 | 5  |
| 56 | 8.855 9323 | 8.857 6845 | 8.859 4296 | 8.861 1676 | 8.862 8987 | 8.864 6229 | 4  |
| 57 | 8.855 9616 | 8.857 7136 | 8.859 4586 | 8.861 1965 | 8.862 9275 | 8.864 6516 | 3  |
| 58 | 8.855 9908 | 8.857 7428 | 8.859 4876 | 8.861 2255 | 8.862 9563 | 8.864 6803 | 2  |
| 59 | 8.856 0201 | 8.857 7719 | 8.859 5166 | 8.861 2544 | 8.862 9851 | 8.864 7090 | 1  |
| 60 | 8.856 0493 | 8.857 8010 | 8.859 5457 | 8.861 2833 | 8.863 0139 | 8.864 7376 | 0  |
| "  | 53'        | 52'        | 51'        | 50'        | 49'        | 48'        | "  |



| "  | 6'         | 7'         | 8'         | 9'         | 10'        | 11'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.855 4034 | 8.857 1713 | 8.858 9321 | 8.860 6859 | 8.862 4327 | 8.864 1725 | 60 |
| 1  | 8.855 4329 | 8.857 2007 | 8.858 9614 | 8.860 7150 | 8.862 4617 | 8.864 2015 | 59 |
| 2  | 8.855 4624 | 8.857 2301 | 8.858 9907 | 8.860 7442 | 8.862 4908 | 8.864 2304 | 58 |
| 3  | 8.855 4920 | 8.857 2595 | 8.859 0200 | 8.860 7734 | 8.862 5198 | 8.864 2593 | 57 |
| 4  | 8.855 5215 | 8.857 2889 | 8.859 0492 | 8.860 8025 | 8.862 5489 | 8.864 2883 | 56 |
| 5  | 8.855 5510 | 8.857 3183 | 8.859 0785 | 8.860 8317 | 8.862 5779 | 8.864 3172 | 55 |
| 6  | 8.855 5805 | 8.857 3477 | 8.859 1078 | 8.860 8609 | 8.862 6070 | 8.864 3461 | 54 |
| 7  | 8.855 6100 | 8.857 3771 | 8.859 1371 | 8.860 8900 | 8.862 6360 | 8.864 3751 | 53 |
| 8  | 8.855 6395 | 8.857 4065 | 8.859 1663 | 8.860 9192 | 8.862 6650 | 8.864 4040 | 52 |
| 9  | 8.855 6690 | 8.857 4359 | 8.859 1956 | 8.860 9483 | 8.862 6941 | 8.864 4329 | 51 |
| 10 | 8.855 6985 | 8.857 4653 | 8.859 2249 | 8.860 9775 | 8.862 7231 | 8.864 4618 | 50 |
| 11 | 8.855 7280 | 8.857 4946 | 8.859 2542 | 8.861 0066 | 8.862 7522 | 8.864 4908 | 49 |
| 12 | 8.855 7575 | 8.857 5240 | 8.859 2834 | 8.861 0358 | 8.862 7812 | 8.864 5197 | 48 |
| 13 | 8.855 7870 | 8.857 5534 | 8.859 3127 | 8.861 0649 | 8.862 8102 | 8.864 5486 | 47 |
| 14 | 8.855 8165 | 8.857 5828 | 8.859 3419 | 8.861 0941 | 8.862 8392 | 8.864 5775 | 46 |
| 15 | 8.855 8460 | 8.857 6122 | 8.859 3712 | 8.861 1232 | 8.862 8683 | 8.864 6064 | 45 |
| 16 | 8.855 8755 | 8.857 6415 | 8.859 4005 | 8.861 1524 | 8.862 8973 | 8.864 6353 | 44 |
| 17 | 8.855 9050 | 8.857 6709 | 8.859 4297 | 8.861 1815 | 8.862 9263 | 8.864 6642 | 43 |
| 18 | 8.855 9345 | 8.857 7003 | 8.859 4590 | 8.861 2106 | 8.862 9553 | 8.864 6931 | 42 |
| 19 | 8.855 9640 | 8.857 7296 | 8.859 4882 | 8.861 2398 | 8.862 9844 | 8.864 7220 | 41 |
| 20 | 8.855 9935 | 8.857 7590 | 8.859 5175 | 8.861 2689 | 8.863 0134 | 8.864 7510 | 40 |
| 21 | 8.856 0230 | 8.857 7884 | 8.859 5467 | 8.861 2980 | 8.863 0424 | 8.864 7799 | 39 |
| 22 | 8.856 0525 | 8.857 8177 | 8.859 5760 | 8.861 3272 | 8.863 0714 | 8.864 8088 | 38 |
| 23 | 8.856 0819 | 8.857 8471 | 8.859 6052 | 8.861 3563 | 8.863 1004 | 8.864 8376 | 37 |
| 24 | 8.856 1114 | 8.857 8765 | 8.859 6345 | 8.861 3854 | 8.863 1294 | 8.864 8665 | 36 |
| 25 | 8.856 1409 | 8.857 9058 | 8.859 6637 | 8.861 4145 | 8.863 1584 | 8.864 8954 | 35 |
| 26 | 8.856 1704 | 8.857 9352 | 8.859 6929 | 8.861 4437 | 8.863 1874 | 8.864 9243 | 34 |
| 27 | 8.856 1998 | 8.857 9645 | 8.859 7222 | 8.861 4728 | 8.863 2165 | 8.864 9532 | 33 |
| 28 | 8.856 2293 | 8.857 9939 | 8.859 7514 | 8.861 5019 | 8.863 2455 | 8.864 9821 | 32 |
| 29 | 8.856 2588 | 8.858 0232 | 8.859 7806 | 8.861 5310 | 8.863 2745 | 8.865 0110 | 31 |
| 30 | 8.856 2882 | 8.858 0526 | 8.859 8099 | 8.861 5601 | 8.863 3035 | 8.865 0399 | 30 |
| 31 | 8.856 3177 | 8.858 0819 | 8.859 8391 | 8.861 5892 | 8.863 3325 | 8.865 0688 | 29 |
| 32 | 8.856 3472 | 8.858 1113 | 8.859 8683 | 8.861 6184 | 8.863 3614 | 8.865 0976 | 28 |
| 33 | 8.856 3766 | 8.858 1406 | 8.859 8975 | 8.861 6475 | 8.863 3904 | 8.865 1265 | 27 |
| 34 | 8.856 4061 | 8.858 1700 | 8.859 9268 | 8.861 6766 | 8.863 4194 | 8.865 1554 | 26 |
| 35 | 8.856 4355 | 8.858 1993 | 8.859 9560 | 8.861 7057 | 8.863 4484 | 8.865 1843 | 25 |
| 36 | 8.856 4650 | 8.858 2286 | 8.859 9852 | 8.861 7348 | 8.863 4774 | 8.865 2131 | 24 |
| 37 | 8.856 4944 | 8.858 2580 | 8.860 0144 | 8.861 7639 | 8.863 5064 | 8.865 2420 | 23 |
| 38 | 8.856 5239 | 8.858 2873 | 8.860 0436 | 8.861 7930 | 8.863 5354 | 8.865 2709 | 22 |
| 39 | 8.856 5533 | 8.858 3166 | 8.860 0728 | 8.861 8221 | 8.863 5644 | 8.865 2998 | 21 |
| 40 | 8.856 5828 | 8.858 3460 | 8.860 1021 | 8.861 8512 | 8.863 5933 | 8.865 3286 | 20 |
| 41 | 8.856 6122 | 8.858 3753 | 8.860 1313 | 8.861 8803 | 8.863 6223 | 8.865 3575 | 19 |
| 42 | 8.856 6417 | 8.858 4046 | 8.860 1605 | 8.861 9094 | 8.863 6513 | 8.865 3863 | 18 |
| 43 | 8.856 6711 | 8.858 4339 | 8.860 1897 | 8.861 9384 | 8.863 6803 | 8.865 4152 | 17 |
| 44 | 8.856 7006 | 8.858 4632 | 8.860 2189 | 8.861 9675 | 8.863 7092 | 8.865 4441 | 16 |
| 45 | 8.856 7300 | 8.858 4926 | 8.860 2481 | 8.861 9966 | 8.863 7382 | 8.865 4729 | 15 |
| 46 | 8.856 7594 | 8.858 5219 | 8.860 2773 | 8.862 0257 | 8.863 7672 | 8.865 5018 | 14 |
| 47 | 8.856 7889 | 8.858 5512 | 8.860 3065 | 8.862 0548 | 8.863 7961 | 8.865 5306 | 13 |
| 48 | 8.856 8183 | 8.858 5805 | 8.860 3357 | 8.862 0839 | 8.863 8251 | 8.865 5595 | 12 |
| 49 | 8.856 8477 | 8.858 6098 | 8.860 3649 | 8.862 1129 | 8.863 8541 | 8.865 5883 | 11 |
| 50 | 8.856 8771 | 8.858 6391 | 8.860 3941 | 8.862 1420 | 8.863 8830 | 8.865 6172 | 10 |
| 51 | 8.856 9066 | 8.858 6684 | 8.860 4233 | 8.862 1711 | 8.863 9120 | 8.865 6460 | 9  |
| 52 | 8.856 9360 | 8.858 6977 | 8.860 4524 | 8.862 2002 | 8.863 9409 | 8.865 6749 | 8  |
| 53 | 8.856 9654 | 8.858 7270 | 8.860 4816 | 8.862 2292 | 8.863 9699 | 8.865 7037 | 7  |
| 54 | 8.856 9948 | 8.858 7563 | 8.860 5108 | 8.862 2583 | 8.863 9988 | 8.865 7325 | 6  |
| 55 | 8.857 0242 | 8.858 7856 | 8.860 5400 | 8.862 2874 | 8.864 0278 | 8.865 7614 | 5  |
| 56 | 8.857 0537 | 8.858 8149 | 8.860 5692 | 8.862 3164 | 8.864 0567 | 8.865 7902 | 4  |
| 57 | 8.857 0831 | 8.858 8442 | 8.860 5983 | 8.862 3455 | 8.864 0857 | 8.865 8190 | 3  |
| 58 | 8.857 1125 | 8.858 8735 | 8.860 6275 | 8.862 3745 | 8.864 1146 | 8.865 8479 | 2  |
| 59 | 8.857 1419 | 8.858 9028 | 8.860 6567 | 8.862 4036 | 8.864 1436 | 8.865 8767 | 1  |
| 60 | 8.857 1713 | 8.858 9321 | 8.860 6859 | 8.862 4327 | 8.864 1725 | 8.865 9055 | 0  |
| "  | 58'        | 52'        | 51'        | 50'        | 49'        | 48'        | "  |



| "  | 12'        | 13'        | 14'        | 15'        | 16'        | 17'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.864 7376 | 8.866 4545 | 8.868 1636 | 8.869 8654 | 8.871 5546 | 8.873 2346 | 60 |
| 1  | 8.864 7663 | 8.866 4831 | 8.868 1921 | 8.869 8943 | 8.871 5844 | 8.873 2642 | 59 |
| 2  | 8.864 7950 | 8.866 5116 | 8.868 2207 | 8.869 9230 | 8.871 6131 | 8.873 2929 | 58 |
| 3  | 8.864 8237 | 8.866 5402 | 8.868 2492 | 8.869 9516 | 8.871 6417 | 8.873 3215 | 57 |
| 4  | 8.864 8523 | 8.866 5687 | 8.868 2778 | 8.869 9802 | 8.871 6703 | 8.873 3501 | 56 |
| 5  | 8.864 8810 | 8.866 5973 | 8.868 3063 | 8.869 1000 | 8.871 6989 | 8.873 3787 | 55 |
| 6  | 8.864 9096 | 8.866 6258 | 8.868 3348 | 8.869 1087 | 8.871 7274 | 8.873 4072 | 54 |
| 7  | 8.864 9383 | 8.866 6544 | 8.868 3634 | 8.869 1174 | 8.871 7560 | 8.873 4358 | 53 |
| 8  | 8.864 9670 | 8.866 6829 | 8.868 3919 | 8.869 1260 | 8.871 7845 | 8.873 4643 | 52 |
| 9  | 8.864 9956 | 8.866 7115 | 8.868 4204 | 8.869 1347 | 8.871 8131 | 8.873 4929 | 51 |
| 10 | 8.865 0243 | 8.866 7400 | 8.868 4489 | 8.869 1433 | 8.871 8416 | 8.873 5214 | 50 |
| 11 | 8.865 0529 | 8.866 7686 | 8.868 4774 | 8.869 1520 | 8.871 8702 | 8.873 5500 | 49 |
| 12 | 8.865 0816 | 8.866 7971 | 8.868 5059 | 8.869 1606 | 8.871 8987 | 8.873 5785 | 48 |
| 13 | 8.865 1102 | 8.866 8256 | 8.868 5344 | 8.869 1692 | 8.871 9273 | 8.873 6071 | 47 |
| 14 | 8.865 1389 | 8.866 8542 | 8.868 5629 | 8.869 1778 | 8.871 9558 | 8.873 6356 | 46 |
| 15 | 8.865 1675 | 8.866 8827 | 8.868 5914 | 8.869 1864 | 8.871 9844 | 8.873 6642 | 45 |
| 16 | 8.865 1961 | 8.866 9112 | 8.868 6199 | 8.869 1950 | 8.872 0129 | 8.873 6927 | 44 |
| 17 | 8.865 2248 | 8.866 9397 | 8.868 6484 | 8.869 2036 | 8.872 0415 | 8.873 7213 | 43 |
| 18 | 8.865 2534 | 8.866 9683 | 8.868 6769 | 8.869 2122 | 8.872 0700 | 8.873 7498 | 42 |
| 19 | 8.865 2821 | 8.866 9968 | 8.868 7054 | 8.869 2208 | 8.872 0986 | 8.873 7784 | 41 |
| 20 | 8.865 3107 | 8.867 0253 | 8.868 7339 | 8.869 2294 | 8.872 1271 | 8.873 8069 | 40 |
| 21 | 8.865 3393 | 8.867 0538 | 8.868 7624 | 8.869 2380 | 8.872 1557 | 8.873 8355 | 39 |
| 22 | 8.865 3680 | 8.867 0824 | 8.868 7909 | 8.869 2466 | 8.872 1842 | 8.873 8640 | 38 |
| 23 | 8.865 3966 | 8.867 1109 | 8.868 8194 | 8.869 2552 | 8.872 2128 | 8.873 8926 | 37 |
| 24 | 8.865 4252 | 8.867 1394 | 8.868 8479 | 8.869 2638 | 8.872 2413 | 8.873 9211 | 36 |
| 25 | 8.865 4538 | 8.867 1679 | 8.868 8764 | 8.869 2724 | 8.872 2699 | 8.873 9497 | 35 |
| 26 | 8.865 4825 | 8.867 1964 | 8.868 9049 | 8.869 2810 | 8.872 2984 | 8.873 9782 | 34 |
| 27 | 8.865 5111 | 8.867 2249 | 8.868 9334 | 8.869 2896 | 8.872 3270 | 8.874 0068 | 33 |
| 28 | 8.865 5397 | 8.867 2534 | 8.868 9619 | 8.869 2982 | 8.872 3555 | 8.874 0353 | 32 |
| 29 | 8.865 5683 | 8.867 2819 | 8.868 9904 | 8.869 3068 | 8.872 3841 | 8.874 0639 | 31 |
| 30 | 8.865 5969 | 8.867 3104 | 8.869 0189 | 8.869 3154 | 8.872 4126 | 8.874 0924 | 30 |
| 31 | 8.865 6256 | 8.867 3389 | 8.869 0474 | 8.869 3240 | 8.872 4412 | 8.874 1210 | 29 |
| 32 | 8.865 6542 | 8.867 3674 | 8.869 0759 | 8.869 3326 | 8.872 4697 | 8.874 1495 | 28 |
| 33 | 8.865 6828 | 8.867 3959 | 8.869 1044 | 8.869 3412 | 8.872 4983 | 8.874 1781 | 27 |
| 34 | 8.865 7114 | 8.867 4244 | 8.869 1329 | 8.869 3498 | 8.872 5268 | 8.874 2066 | 26 |
| 35 | 8.865 7400 | 8.867 4529 | 8.869 1614 | 8.869 3584 | 8.872 5554 | 8.874 2352 | 25 |
| 36 | 8.865 7686 | 8.867 4814 | 8.869 1899 | 8.869 3670 | 8.872 5839 | 8.874 2637 | 24 |
| 37 | 8.865 7972 | 8.867 5099 | 8.869 2184 | 8.869 3756 | 8.872 6125 | 8.874 2923 | 23 |
| 38 | 8.865 8258 | 8.867 5384 | 8.869 2469 | 8.869 3842 | 8.872 6410 | 8.874 3208 | 22 |
| 39 | 8.865 8544 | 8.867 5669 | 8.869 2754 | 8.869 3928 | 8.872 6696 | 8.874 3494 | 21 |
| 40 | 8.865 8830 | 8.867 5953 | 8.869 3039 | 8.869 4014 | 8.872 6981 | 8.874 3779 | 20 |
| 41 | 8.865 9116 | 8.867 6238 | 8.869 3324 | 8.869 4100 | 8.872 7267 | 8.874 4065 | 19 |
| 42 | 8.865 9402 | 8.867 6523 | 8.869 3609 | 8.869 4186 | 8.872 7552 | 8.874 4350 | 18 |
| 43 | 8.865 9688 | 8.867 6808 | 8.869 3894 | 8.869 4272 | 8.872 7838 | 8.874 4636 | 17 |
| 44 | 8.865 9974 | 8.867 7093 | 8.869 4179 | 8.869 4358 | 8.872 8123 | 8.874 4921 | 16 |
| 45 | 8.866 0259 | 8.867 7377 | 8.869 4464 | 8.869 4444 | 8.872 8409 | 8.874 5207 | 15 |
| 46 | 8.866 0545 | 8.867 7662 | 8.869 4749 | 8.869 4530 | 8.872 8694 | 8.874 5492 | 14 |
| 47 | 8.866 0831 | 8.867 7947 | 8.869 5034 | 8.869 4616 | 8.872 8980 | 8.874 5778 | 13 |
| 48 | 8.866 1117 | 8.867 8231 | 8.869 5319 | 8.869 4702 | 8.872 9265 | 8.874 6063 | 12 |
| 49 | 8.866 1403 | 8.867 8516 | 8.869 5604 | 8.869 4788 | 8.872 9551 | 8.874 6349 | 11 |
| 50 | 8.866 1689 | 8.867 8801 | 8.869 5889 | 8.869 4874 | 8.872 9836 | 8.874 6634 | 10 |
| 51 | 8.866 1974 | 8.867 9085 | 8.869 6174 | 8.869 4960 | 8.873 0122 | 8.874 6920 | 9  |
| 52 | 8.866 2260 | 8.867 9370 | 8.869 6459 | 8.869 5046 | 8.873 0407 | 8.874 7205 | 8  |
| 53 | 8.866 2546 | 8.867 9655 | 8.869 6744 | 8.869 5132 | 8.873 0693 | 8.874 7491 | 7  |
| 54 | 8.866 2831 | 8.867 9939 | 8.869 7029 | 8.869 5218 | 8.873 0978 | 8.874 7776 | 6  |
| 55 | 8.866 3117 | 8.868 0224 | 8.869 7314 | 8.869 5304 | 8.873 1264 | 8.874 8062 | 5  |
| 56 | 8.866 3403 | 8.868 0508 | 8.869 7599 | 8.869 5390 | 8.873 1549 | 8.874 8347 | 4  |
| 57 | 8.866 3688 | 8.868 0793 | 8.869 7884 | 8.869 5476 | 8.873 1835 | 8.874 8633 | 3  |
| 58 | 8.866 3974 | 8.868 1077 | 8.869 8169 | 8.869 5562 | 8.873 2120 | 8.874 8918 | 2  |
| 59 | 8.866 4260 | 8.868 1362 | 8.869 8454 | 8.869 5648 | 8.873 2406 | 8.874 9204 | 1  |
| 60 | 8.866 4545 | 8.868 1646 | 8.869 8739 | 8.869 5734 | 8.873 2691 | 8.874 9489 | 0  |
| "  | 47'        | 46'        | 45'        | 44'        | 43'        | 42'        | "  |



| "  | 12'        | 13'        | 14'        | 15'        | 16'        | 17'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.865 9055 | 8.867 6317 | 8.869 3511 | 8.871 0638 | 8.872 7699 | 8.874 4694 | 60 |
| 1  | 8.865 9343 | 8.867 6604 | 8.869 3797 | 8.871 0923 | 8.872 7983 | 8.874 4976 | 59 |
| 2  | 8.865 9632 | 8.867 6891 | 8.869 4083 | 8.871 1208 | 8.872 8267 | 8.874 5259 | 58 |
| 3  | 8.865 9920 | 8.867 7178 | 8.869 4369 | 8.871 1493 | 8.872 8550 | 8.874 5542 | 57 |
| 4  | 8.866 0208 | 8.867 7465 | 8.869 4655 | 8.871 1778 | 8.872 8834 | 8.874 5824 | 56 |
| 5  | 8.866 0496 | 8.867 7752 | 8.869 4941 | 8.871 2063 | 8.872 9118 | 8.874 6107 | 55 |
| 6  | 8.866 0784 | 8.867 8039 | 8.869 5227 | 8.871 2347 | 8.872 9401 | 8.874 6389 | 54 |
| 7  | 8.866 1073 | 8.867 8326 | 8.869 5513 | 8.871 2632 | 8.872 9685 | 8.874 6672 | 53 |
| 8  | 8.866 1361 | 8.867 8613 | 8.869 5799 | 8.871 2917 | 8.872 9969 | 8.874 6955 | 52 |
| 9  | 8.866 1649 | 8.867 8900 | 8.869 6085 | 8.871 3202 | 8.873 0252 | 8.874 7237 | 51 |
| 10 | 8.866 1937 | 8.867 9187 | 8.869 6370 | 8.871 3486 | 8.873 0536 | 8.874 7520 | 50 |
| 11 | 8.866 2225 | 8.867 9474 | 8.869 6656 | 8.871 3771 | 8.873 0820 | 8.874 7802 | 49 |
| 12 | 8.866 2513 | 8.867 9761 | 8.869 6942 | 8.871 4056 | 8.873 1103 | 8.874 8085 | 48 |
| 13 | 8.866 2801 | 8.868 0048 | 8.869 7228 | 8.871 4340 | 8.873 1387 | 8.874 8367 | 47 |
| 14 | 8.866 3089 | 8.868 0335 | 8.869 7514 | 8.871 4625 | 8.873 1670 | 8.874 8650 | 46 |
| 15 | 8.866 3377 | 8.868 0622 | 8.869 7799 | 8.871 4910 | 8.873 1954 | 8.874 8932 | 45 |
| 16 | 8.866 3665 | 8.868 0909 | 8.869 8085 | 8.871 5194 | 8.873 2237 | 8.874 9214 | 44 |
| 17 | 8.866 3953 | 8.868 1196 | 8.869 8371 | 8.871 5479 | 8.873 2521 | 8.874 9497 | 43 |
| 18 | 8.866 4241 | 8.868 1482 | 8.869 8656 | 8.871 5764 | 8.873 2804 | 8.874 9779 | 42 |
| 19 | 8.866 4529 | 8.868 1769 | 8.869 8942 | 8.871 6048 | 8.873 3088 | 8.875 0062 | 41 |
| 20 | 8.866 4817 | 8.868 2056 | 8.869 9228 | 8.871 6333 | 8.873 3371 | 8.875 0344 | 40 |
| 21 | 8.866 5105 | 8.868 2343 | 8.869 9513 | 8.871 6617 | 8.873 3655 | 8.875 0626 | 39 |
| 22 | 8.866 5392 | 8.868 2629 | 8.869 9799 | 8.871 6902 | 8.873 3938 | 8.875 0908 | 38 |
| 23 | 8.866 5680 | 8.868 2916 | 8.870 0085 | 8.871 7186 | 8.873 4221 | 8.875 1191 | 37 |
| 24 | 8.866 5968 | 8.868 3203 | 8.870 0370 | 8.871 7471 | 8.873 4505 | 8.875 1473 | 36 |
| 25 | 8.866 6256 | 8.868 3489 | 8.870 0656 | 8.871 7755 | 8.873 4788 | 8.875 1755 | 35 |
| 26 | 8.866 6544 | 8.868 3776 | 8.870 0941 | 8.871 8039 | 8.873 5071 | 8.875 2038 | 34 |
| 27 | 8.866 6831 | 8.868 4063 | 8.870 1227 | 8.871 8324 | 8.873 5355 | 8.875 2320 | 33 |
| 28 | 8.866 7119 | 8.868 4349 | 8.870 1512 | 8.871 8608 | 8.873 5638 | 8.875 2602 | 32 |
| 29 | 8.866 7407 | 8.868 4636 | 8.870 1798 | 8.871 8893 | 8.873 5921 | 8.875 2884 | 31 |
| 30 | 8.866 7695 | 8.868 4923 | 8.870 2083 | 8.871 9177 | 8.873 6205 | 8.875 3166 | 30 |
| 31 | 8.866 7982 | 8.868 5209 | 8.870 2369 | 8.871 9461 | 8.873 6488 | 8.875 3448 | 29 |
| 32 | 8.866 8270 | 8.868 5496 | 8.870 2654 | 8.871 9746 | 8.873 6771 | 8.875 3731 | 28 |
| 33 | 8.866 8558 | 8.868 5782 | 8.870 2939 | 8.872 0030 | 8.873 7054 | 8.875 4013 | 27 |
| 34 | 8.866 8845 | 8.868 6069 | 8.870 3225 | 8.872 0314 | 8.873 7337 | 8.875 4295 | 26 |
| 35 | 8.866 9133 | 8.868 6355 | 8.870 3510 | 8.872 0598 | 8.873 7621 | 8.875 4577 | 25 |
| 36 | 8.866 9420 | 8.868 6642 | 8.870 3796 | 8.872 0883 | 8.873 7904 | 8.875 4859 | 24 |
| 37 | 8.866 9708 | 8.868 6928 | 8.870 4081 | 8.872 1167 | 8.873 8187 | 8.875 5141 | 23 |
| 38 | 8.866 9996 | 8.868 7215 | 8.870 4366 | 8.872 1451 | 8.873 8470 | 8.875 5423 | 22 |
| 39 | 8.867 0283 | 8.868 7501 | 8.870 4651 | 8.872 1735 | 8.873 8753 | 8.875 5705 | 21 |
| 40 | 8.867 0571 | 8.868 7787 | 8.870 4937 | 8.872 2019 | 8.873 9036 | 8.875 5987 | 20 |
| 41 | 8.867 0858 | 8.868 8074 | 8.870 5222 | 8.872 2304 | 8.873 9319 | 8.875 6269 | 19 |
| 42 | 8.867 1146 | 8.868 8360 | 8.870 5507 | 8.872 2588 | 8.873 9602 | 8.875 6551 | 18 |
| 43 | 8.867 1433 | 8.868 8646 | 8.870 5792 | 8.872 2872 | 8.873 9885 | 8.875 6833 | 17 |
| 44 | 8.867 1721 | 8.868 8933 | 8.870 6078 | 8.872 3156 | 8.874 0168 | 8.875 7115 | 16 |
| 45 | 8.867 2008 | 8.868 9219 | 8.870 6363 | 8.872 3440 | 8.874 0451 | 8.875 7397 | 15 |
| 46 | 8.867 2295 | 8.868 9505 | 8.870 6648 | 8.872 3724 | 8.874 0734 | 8.875 7678 | 14 |
| 47 | 8.867 2583 | 8.868 9792 | 8.870 6933 | 8.872 4008 | 8.874 1017 | 8.875 7960 | 13 |
| 48 | 8.867 2870 | 8.869 0078 | 8.870 7218 | 8.872 4292 | 8.874 1300 | 8.875 8242 | 12 |
| 49 | 8.867 3157 | 8.869 0364 | 8.870 7503 | 8.872 4576 | 8.874 1583 | 8.875 8524 | 11 |
| 50 | 8.867 3445 | 8.869 0650 | 8.870 7789 | 8.872 4860 | 8.874 1866 | 8.875 8806 | 10 |
| 51 | 8.867 3732 | 8.869 0936 | 8.870 8074 | 8.872 5144 | 8.874 2149 | 8.875 9087 | 9  |
| 52 | 8.867 4019 | 8.869 1223 | 8.870 8359 | 8.872 5428 | 8.874 2431 | 8.875 9369 | 8  |
| 53 | 8.867 4307 | 8.869 1509 | 8.870 8644 | 8.872 5712 | 8.874 2714 | 8.875 9651 | 7  |
| 54 | 8.867 4594 | 8.869 1795 | 8.870 8929 | 8.872 5996 | 8.874 2997 | 8.875 9933 | 6  |
| 55 | 8.867 4881 | 8.869 2081 | 8.870 9214 | 8.872 6280 | 8.874 3280 | 8.876 0214 | 5  |
| 56 | 8.867 5168 | 8.869 2367 | 8.870 9499 | 8.872 6564 | 8.874 3563 | 8.876 0496 | 4  |
| 57 | 8.867 5456 | 8.869 2653 | 8.870 9784 | 8.872 6848 | 8.874 3845 | 8.876 0778 | 3  |
| 58 | 8.867 5743 | 8.869 2939 | 8.871 0069 | 8.872 7131 | 8.874 4128 | 8.876 1059 | 2  |
| 59 | 8.867 6030 | 8.869 3225 | 8.871 0353 | 8.872 7415 | 8.874 4411 | 8.876 1341 | 1  |
| 60 | 8.867 6317 | 8.869 3511 | 8.871 0638 | 8.872 7699 | 8.874 4694 | 8.876 1623 | 0  |
| "  | 47'        | 46'        | 45'        | 44'        | 43'        | 42'        | "  |



| "  | 18'        | 19'        | 20'        | 21'        | 22'        | 23'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.874 9381 | 8.876 6150 | 8.878 2854 | 8.879 9493 | 8.881 6069 | 8.883 2581 | 60 |
| 1  | 8.874 9661 | 8.876 6428 | 8.878 3131 | 8.879 9770 | 8.881 6345 | 8.883 2856 | 59 |
| 2  | 8.874 9941 | 8.876 6707 | 8.878 3409 | 8.880 0047 | 8.881 6620 | 8.883 3131 | 58 |
| 3  | 8.875 0221 | 8.876 6986 | 8.878 3687 | 8.880 0324 | 8.881 6896 | 8.883 3405 | 57 |
| 4  | 8.875 0501 | 8.876 7265 | 8.878 3965 | 8.880 0600 | 8.881 7172 | 8.883 3680 | 56 |
| 5  | 8.875 0781 | 8.876 7544 | 8.878 4243 | 8.880 0877 | 8.881 7447 | 8.883 3955 | 55 |
| 6  | 8.875 1060 | 8.876 7823 | 8.878 4520 | 8.880 1154 | 8.881 7723 | 8.883 4229 | 54 |
| 7  | 8.875 1340 | 8.876 8102 | 8.878 4798 | 8.880 1430 | 8.881 7999 | 8.883 4504 | 53 |
| 8  | 8.875 1620 | 8.876 8380 | 8.878 5076 | 8.880 1707 | 8.881 8274 | 8.883 4778 | 52 |
| 9  | 8.875 1900 | 8.876 8659 | 8.878 5354 | 8.880 1984 | 8.881 8550 | 8.883 5053 | 51 |
| 10 | 8.875 2180 | 8.876 8938 | 8.878 5631 | 8.880 2260 | 8.881 8825 | 8.883 5327 | 50 |
| 11 | 8.875 2460 | 8.876 9217 | 8.878 5909 | 8.880 2537 | 8.881 9101 | 8.883 5602 | 49 |
| 12 | 8.875 2740 | 8.876 9496 | 8.878 6187 | 8.880 2813 | 8.881 9377 | 8.883 5876 | 48 |
| 13 | 8.875 3019 | 8.876 9774 | 8.878 6464 | 8.880 3090 | 8.881 9652 | 8.883 6151 | 47 |
| 14 | 8.875 3299 | 8.877 0053 | 8.878 6742 | 8.880 3367 | 8.881 9928 | 8.883 6425 | 46 |
| 15 | 8.875 3579 | 8.877 0332 | 8.878 7019 | 8.880 3643 | 8.882 0203 | 8.883 6700 | 45 |
| 16 | 8.875 3859 | 8.877 0610 | 8.878 7297 | 8.880 3920 | 8.882 0479 | 8.883 6974 | 44 |
| 17 | 8.875 4138 | 8.877 0889 | 8.878 7575 | 8.880 4196 | 8.882 0754 | 8.883 7248 | 43 |
| 18 | 8.875 4418 | 8.877 1168 | 8.878 7852 | 8.880 4473 | 8.882 1029 | 8.883 7523 | 42 |
| 19 | 8.875 4698 | 8.877 1446 | 8.878 8130 | 8.880 4749 | 8.882 1305 | 8.883 7797 | 41 |
| 20 | 8.875 4977 | 8.877 1725 | 8.878 8407 | 8.880 5026 | 8.882 1580 | 8.883 8072 | 40 |
| 21 | 8.875 5257 | 8.877 2003 | 8.878 8685 | 8.880 5302 | 8.882 1856 | 8.883 8346 | 39 |
| 22 | 8.875 5537 | 8.877 2282 | 8.878 8962 | 8.880 5578 | 8.882 2131 | 8.883 8620 | 38 |
| 23 | 8.875 5816 | 8.877 2560 | 8.878 9240 | 8.880 5855 | 8.882 2406 | 8.883 8894 | 37 |
| 24 | 8.875 6096 | 8.877 2839 | 8.878 9517 | 8.880 6131 | 8.882 2682 | 8.883 9169 | 36 |
| 25 | 8.875 6375 | 8.877 3117 | 8.878 9795 | 8.880 6408 | 8.882 2957 | 8.883 9443 | 35 |
| 26 | 8.875 6655 | 8.877 3396 | 8.879 0072 | 8.880 6684 | 8.882 3232 | 8.883 9717 | 34 |
| 27 | 8.875 6935 | 8.877 3674 | 8.879 0349 | 8.880 6960 | 8.882 3507 | 8.883 9991 | 33 |
| 28 | 8.875 7214 | 8.877 3953 | 8.879 0627 | 8.880 7237 | 8.882 3783 | 8.884 0266 | 32 |
| 29 | 8.875 7494 | 8.877 4231 | 8.879 0904 | 8.880 7513 | 8.882 4058 | 8.884 0540 | 31 |
| 30 | 8.875 7773 | 8.877 4510 | 8.879 1181 | 8.880 7789 | 8.882 4333 | 8.884 0814 | 30 |
| 31 | 8.875 8053 | 8.877 4788 | 8.879 1459 | 8.880 8065 | 8.882 4608 | 8.884 1088 | 29 |
| 32 | 8.875 8332 | 8.877 5066 | 8.879 1736 | 8.880 8342 | 8.882 4884 | 8.884 1362 | 28 |
| 33 | 8.875 8612 | 8.877 5345 | 8.879 2013 | 8.880 8618 | 8.882 5159 | 8.884 1636 | 27 |
| 34 | 8.875 8891 | 8.877 5623 | 8.879 2291 | 8.880 8894 | 8.882 5434 | 8.884 1911 | 26 |
| 35 | 8.875 9170 | 8.877 5901 | 8.879 2568 | 8.880 9170 | 8.882 5709 | 8.884 2185 | 25 |
| 36 | 8.875 9450 | 8.877 6180 | 8.879 2845 | 8.880 9446 | 8.882 5984 | 8.884 2459 | 24 |
| 37 | 8.875 9729 | 8.877 6458 | 8.879 3122 | 8.880 9722 | 8.882 6259 | 8.884 2733 | 23 |
| 38 | 8.876 0008 | 8.877 6736 | 8.879 3399 | 8.880 9999 | 8.882 6534 | 8.884 3007 | 22 |
| 39 | 8.876 0288 | 8.877 7014 | 8.879 3677 | 8.881 0275 | 8.882 6809 | 8.884 3281 | 21 |
| 40 | 8.876 0567 | 8.877 7293 | 8.879 3954 | 8.881 0551 | 8.882 7084 | 8.884 3555 | 20 |
| 41 | 8.876 0846 | 8.877 7571 | 8.879 4231 | 8.881 0827 | 8.882 7359 | 8.884 3829 | 19 |
| 42 | 8.876 1126 | 8.877 7849 | 8.879 4508 | 8.881 1103 | 8.882 7634 | 8.884 4103 | 18 |
| 43 | 8.876 1405 | 8.877 8127 | 8.879 4785 | 8.881 1379 | 8.882 7909 | 8.884 4377 | 17 |
| 44 | 8.876 1684 | 8.877 8405 | 8.879 5062 | 8.881 1655 | 8.882 8184 | 8.884 4651 | 16 |
| 45 | 8.876 1963 | 8.877 8684 | 8.879 5339 | 8.881 1931 | 8.882 8459 | 8.884 4924 | 15 |
| 46 | 8.876 2243 | 8.877 8962 | 8.879 5616 | 8.881 2207 | 8.882 8734 | 8.884 5198 | 14 |
| 47 | 8.876 2522 | 8.877 9240 | 8.879 5893 | 8.881 2483 | 8.882 9009 | 8.884 5472 | 13 |
| 48 | 8.876 2801 | 8.877 9518 | 8.879 6170 | 8.881 2759 | 8.882 9284 | 8.884 5746 | 12 |
| 49 | 8.876 3080 | 8.877 9796 | 8.879 6447 | 8.881 3035 | 8.882 9559 | 8.884 6020 | 11 |
| 50 | 8.876 3359 | 8.878 0074 | 8.879 6724 | 8.881 3311 | 8.882 9834 | 8.884 6294 | 10 |
| 51 | 8.876 3638 | 8.878 0352 | 8.879 7001 | 8.881 3587 | 8.883 0109 | 8.884 6567 | 9  |
| 52 | 8.876 3917 | 8.878 0630 | 8.879 7278 | 8.881 3863 | 8.883 0383 | 8.884 6841 | 8  |
| 53 | 8.876 4197 | 8.878 0908 | 8.879 7555 | 8.881 4138 | 8.883 0658 | 8.884 7115 | 7  |
| 54 | 8.876 4476 | 8.878 1186 | 8.879 7832 | 8.881 4414 | 8.883 0933 | 8.884 7389 | 6  |
| 55 | 8.876 4755 | 8.878 1464 | 8.879 8109 | 8.881 4690 | 8.883 1208 | 8.884 7663 | 5  |
| 56 | 8.876 5034 | 8.878 1742 | 8.879 8386 | 8.881 4966 | 8.883 1483 | 8.884 7936 | 4  |
| 57 | 8.876 5313 | 8.878 2020 | 8.879 8663 | 8.881 5242 | 8.883 1757 | 8.884 8210 | 3  |
| 58 | 8.876 5592 | 8.878 2298 | 8.879 8940 | 8.881 5518 | 8.883 2032 | 8.884 8484 | 2  |
| 59 | 8.876 5871 | 8.878 2576 | 8.879 9216 | 8.881 5793 | 8.883 2307 | 8.884 8757 | 1  |
| 60 | 8.876 6150 | 8.878 2854 | 8.879 9493 | 8.881 6069 | 8.883 2581 | 8.884 9031 | 0  |
| "  | 41'        | 40'        | 39'        | 38'        | 37'        | 36'        | "  |







| "  | 24'        | 25'        | 26'        | 27'        | 28'        | 29'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.884 9031 | 8.886 5418 | 8.888 1743 | 8.889 8007 | 8.891 4209 | 8.893 0351 | 60 |
| 1  | 8.884 9305 | 8.886 5691 | 8.888 2015 | 8.889 8277 | 8.891 4479 | 8.893 0620 | 59 |
| 2  | 8.884 9578 | 8.886 5963 | 8.888 2286 | 8.889 8548 | 8.891 4748 | 8.893 0888 | 58 |
| 3  | 8.884 9852 | 8.886 6236 | 8.888 2558 | 8.889 8818 | 8.891 5018 | 8.893 1157 | 57 |
| 4  | 8.885 0125 | 8.886 6508 | 8.888 2829 | 8.889 9089 | 8.891 5287 | 8.893 1425 | 56 |
| 5  | 8.885 0399 | 8.886 6781 | 8.888 3101 | 8.889 9359 | 8.891 5557 | 8.893 1694 | 55 |
| 6  | 8.885 0672 | 8.886 7053 | 8.888 3372 | 8.889 9630 | 8.891 5826 | 8.893 1962 | 54 |
| 7  | 8.885 0946 | 8.886 7326 | 8.888 3644 | 8.889 9900 | 8.891 6096 | 8.893 2230 | 53 |
| 8  | 8.885 1219 | 8.886 7598 | 8.888 3915 | 8.890 0171 | 8.891 6365 | 8.893 2499 | 52 |
| 9  | 8.885 1493 | 8.886 7871 | 8.888 4187 | 8.890 0441 | 8.891 6634 | 8.893 2767 | 51 |
| 10 | 8.885 1766 | 8.886 8143 | 8.888 4458 | 8.890 0711 | 8.891 6904 | 8.893 3036 | 50 |
| 11 | 8.885 2040 | 8.886 8416 | 8.888 4729 | 8.890 0982 | 8.891 7173 | 8.893 3304 | 49 |
| 12 | 8.885 2313 | 8.886 8688 | 8.888 5001 | 8.890 1252 | 8.891 7442 | 8.893 3572 | 48 |
| 13 | 8.885 2587 | 8.886 8960 | 8.888 5272 | 8.890 1522 | 8.891 7712 | 8.893 3841 | 47 |
| 14 | 8.885 2860 | 8.886 9233 | 8.888 5543 | 8.890 1793 | 8.891 7981 | 8.893 4109 | 46 |
| 15 | 8.885 3134 | 8.886 9505 | 8.888 5815 | 8.890 2063 | 8.891 8250 | 8.893 4377 | 45 |
| 16 | 8.885 3407 | 8.886 9777 | 8.888 6086 | 8.890 2333 | 8.891 8520 | 8.893 4646 | 44 |
| 17 | 8.885 3680 | 8.887 0050 | 8.888 6357 | 8.890 2604 | 8.891 8789 | 8.893 4914 | 43 |
| 18 | 8.885 3954 | 8.887 0322 | 8.888 6629 | 8.890 2874 | 8.891 9058 | 8.893 5182 | 42 |
| 19 | 8.885 4227 | 8.887 0594 | 8.888 6900 | 8.890 3144 | 8.891 9327 | 8.893 5450 | 41 |
| 20 | 8.885 4500 | 8.887 0867 | 8.888 7171 | 8.890 3414 | 8.891 9597 | 8.893 5718 | 40 |
| 21 | 8.885 4773 | 8.887 1139 | 8.888 7442 | 8.890 3684 | 8.891 9866 | 8.893 5987 | 39 |
| 22 | 8.885 5047 | 8.887 1411 | 8.888 7714 | 8.890 3955 | 8.892 0135 | 8.893 6255 | 38 |
| 23 | 8.885 5320 | 8.887 1683 | 8.888 7985 | 8.890 4225 | 8.892 0404 | 8.893 6523 | 37 |
| 24 | 8.885 5593 | 8.887 1955 | 8.888 8256 | 8.890 4495 | 8.892 0673 | 8.893 6791 | 36 |
| 25 | 8.885 5866 | 8.887 2228 | 8.888 8527 | 8.890 4765 | 8.892 0942 | 8.893 7059 | 35 |
| 26 | 8.885 6140 | 8.887 2500 | 8.888 8798 | 8.890 5035 | 8.892 1211 | 8.893 7327 | 34 |
| 27 | 8.885 6413 | 8.887 2772 | 8.888 9069 | 8.890 5305 | 8.892 1481 | 8.893 7595 | 33 |
| 28 | 8.885 6686 | 8.887 3044 | 8.888 9340 | 8.890 5575 | 8.892 1750 | 8.893 7863 | 32 |
| 29 | 8.885 6959 | 8.887 3316 | 8.888 9611 | 8.890 5845 | 8.892 2019 | 8.893 8132 | 31 |
| 30 | 8.885 7232 | 8.887 3588 | 8.888 9883 | 8.890 6116 | 8.892 2288 | 8.893 8400 | 30 |
| 31 | 8.885 7505 | 8.887 3860 | 8.889 0154 | 8.890 6386 | 8.892 2557 | 8.893 8668 | 29 |
| 32 | 8.885 7778 | 8.887 4132 | 8.889 0425 | 8.890 6656 | 8.892 2826 | 8.893 8936 | 28 |
| 33 | 8.885 8052 | 8.887 4404 | 8.889 0696 | 8.890 6926 | 8.892 3095 | 8.893 9204 | 27 |
| 34 | 8.885 8325 | 8.887 4676 | 8.889 0967 | 8.890 7196 | 8.892 3364 | 8.893 9472 | 26 |
| 35 | 8.885 8598 | 8.887 4948 | 8.889 1238 | 8.890 7466 | 8.892 3633 | 8.893 9740 | 25 |
| 36 | 8.885 8871 | 8.887 5220 | 8.889 1509 | 8.890 7735 | 8.892 3902 | 8.894 0007 | 24 |
| 37 | 8.885 9144 | 8.887 5492 | 8.889 1780 | 8.890 8005 | 8.892 4171 | 8.894 0275 | 23 |
| 38 | 8.885 9417 | 8.887 5764 | 8.889 2050 | 8.890 8275 | 8.892 4439 | 8.894 0543 | 22 |
| 39 | 8.885 9690 | 8.887 6036 | 8.889 2321 | 8.890 8545 | 8.892 4708 | 8.894 0811 | 21 |
| 40 | 8.885 9963 | 8.887 6308 | 8.889 2592 | 8.890 8815 | 8.892 4977 | 8.894 1079 | 20 |
| 41 | 8.886 0235 | 8.887 6580 | 8.889 2863 | 8.890 9085 | 8.892 5246 | 8.894 1347 | 19 |
| 42 | 8.886 0508 | 8.887 6852 | 8.889 3134 | 8.890 9355 | 8.892 5515 | 8.894 1615 | 18 |
| 43 | 8.886 0781 | 8.887 7124 | 8.889 3405 | 8.890 9625 | 8.892 5784 | 8.894 1883 | 17 |
| 44 | 8.886 1054 | 8.887 7396 | 8.889 3676 | 8.890 9894 | 8.892 6053 | 8.894 2150 | 16 |
| 45 | 8.886 1327 | 8.887 7668 | 8.889 3947 | 8.891 0164 | 8.892 6321 | 8.894 2418 | 15 |
| 46 | 8.886 1600 | 8.887 7939 | 8.889 4217 | 8.891 0434 | 8.892 6590 | 8.894 2686 | 14 |
| 47 | 8.886 1873 | 8.887 8211 | 8.889 4488 | 8.891 0704 | 8.892 6859 | 8.894 2954 | 13 |
| 48 | 8.886 2146 | 8.887 8483 | 8.889 4759 | 8.891 0974 | 8.892 7128 | 8.894 3221 | 12 |
| 49 | 8.886 2418 | 8.887 8755 | 8.889 5030 | 8.891 1243 | 8.892 7396 | 8.894 3489 | 11 |
| 50 | 8.886 2691 | 8.887 9027 | 8.889 5300 | 8.891 1513 | 8.892 7665 | 8.894 3757 | 10 |
| 51 | 8.886 2964 | 8.887 9298 | 8.889 5571 | 8.891 1783 | 8.892 7934 | 8.894 4025 | 9  |
| 52 | 8.886 3237 | 8.887 9570 | 8.889 5842 | 8.891 2052 | 8.892 8202 | 8.894 4292 | 8  |
| 53 | 8.886 3509 | 8.887 9842 | 8.889 6112 | 8.891 2322 | 8.892 8471 | 8.894 4560 | 7  |
| 54 | 8.886 3782 | 8.888 0113 | 8.889 6383 | 8.891 2592 | 8.892 8740 | 8.894 4827 | 6  |
| 55 | 8.886 4055 | 8.888 0385 | 8.889 6654 | 8.891 2861 | 8.892 9008 | 8.894 5095 | 5  |
| 56 | 8.886 4327 | 8.888 0657 | 8.889 6924 | 8.891 3131 | 8.892 9277 | 8.894 5363 | 4  |
| 57 | 8.886 4600 | 8.888 0928 | 8.889 7195 | 8.891 3401 | 8.892 9546 | 8.894 5630 | 3  |
| 58 | 8.886 4873 | 8.888 1200 | 8.889 7466 | 8.891 3670 | 8.892 9814 | 8.894 5898 | 2  |
| 59 | 8.886 5145 | 8.888 1471 | 8.889 7736 | 8.891 3940 | 8.893 0083 | 8.894 6165 | 1  |
| 60 | 8.886 5418 | 8.888 1743 | 8.889 8007 | 8.891 4209 | 8.893 0351 | 8.894 6433 | 0  |
| "  | 35'        | 34'        | 33'        | 32'        | 31'        | 30'        | "  |



| "  | 24'        | 25'        | 26'        | 27'        | 28'        | 29'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.886 1850 | 8.887 8334 | 8.889 4757 | 8.891 1119 | 8.892 7420 | 8.894 3660 | 60 |
| 1  | 8.886 2125 | 8.887 8608 | 8.889 5030 | 8.891 1391 | 8.892 7691 | 8.894 3931 | 59 |
| 2  | 8.886 2400 | 8.887 8882 | 8.889 5303 | 8.891 1663 | 8.892 7962 | 8.894 4201 | 58 |
| 3  | 8.886 2675 | 8.887 9157 | 8.889 5576 | 8.891 1935 | 8.892 8233 | 8.894 4471 | 57 |
| 4  | 8.886 2950 | 8.887 9431 | 8.889 5850 | 8.891 2207 | 8.892 8504 | 8.894 4741 | 56 |
| 5  | 8.886 3226 | 8.887 9705 | 8.889 6123 | 8.891 2479 | 8.892 8775 | 8.894 5011 | 55 |
| 6  | 8.886 3501 | 8.887 9979 | 8.889 6396 | 8.891 2751 | 8.892 9046 | 8.894 5281 | 54 |
| 7  | 8.886 3776 | 8.888 0253 | 8.889 6669 | 8.891 3023 | 8.892 9317 | 8.894 5551 | 53 |
| 8  | 8.886 4051 | 8.888 0527 | 8.889 6942 | 8.891 3296 | 8.892 9589 | 8.894 5821 | 52 |
| 9  | 8.886 4326 | 8.888 0801 | 8.889 7215 | 8.891 3568 | 8.892 9860 | 8.894 6091 | 51 |
| 10 | 8.886 4601 | 8.888 1075 | 8.889 7488 | 8.891 3840 | 8.893 0131 | 8.894 6361 | 50 |
| 11 | 8.886 4876 | 8.888 1349 | 8.889 7761 | 8.891 4112 | 8.893 0402 | 8.894 6631 | 49 |
| 12 | 8.886 5151 | 8.888 1623 | 8.889 8034 | 8.891 4384 | 8.893 0673 | 8.894 6901 | 48 |
| 13 | 8.886 5426 | 8.888 1898 | 8.889 8307 | 8.891 4656 | 8.893 0944 | 8.894 7171 | 47 |
| 14 | 8.886 5701 | 8.888 2172 | 8.889 8580 | 8.891 4928 | 8.893 1215 | 8.894 7441 | 46 |
| 15 | 8.886 5976 | 8.888 2445 | 8.889 8853 | 8.891 5200 | 8.893 1485 | 8.894 7711 | 45 |
| 16 | 8.886 6251 | 8.888 2719 | 8.889 9126 | 8.891 5471 | 8.893 1756 | 8.894 7981 | 44 |
| 17 | 8.886 6526 | 8.888 2993 | 8.889 9399 | 8.891 5743 | 8.893 2027 | 8.894 8251 | 43 |
| 18 | 8.886 6801 | 8.888 3267 | 8.889 9672 | 8.891 6015 | 8.893 2298 | 8.894 8521 | 42 |
| 19 | 8.886 7076 | 8.888 3541 | 8.889 9945 | 8.891 6287 | 8.893 2569 | 8.894 8791 | 41 |
| 20 | 8.886 7351 | 8.888 3815 | 8.890 0218 | 8.891 6559 | 8.893 2840 | 8.894 9061 | 40 |
| 21 | 8.886 7626 | 8.888 4089 | 8.890 0490 | 8.891 6831 | 8.893 3111 | 8.894 9331 | 39 |
| 22 | 8.886 7901 | 8.888 4363 | 8.890 0763 | 8.891 7103 | 8.893 3382 | 8.894 9600 | 38 |
| 23 | 8.886 8176 | 8.888 4637 | 8.890 1036 | 8.891 7374 | 8.893 3652 | 8.894 9870 | 37 |
| 24 | 8.886 8451 | 8.888 4911 | 8.890 1309 | 8.891 7646 | 8.893 3923 | 8.895 0140 | 36 |
| 25 | 8.886 8726 | 8.888 5184 | 8.890 1582 | 8.891 7918 | 8.893 4194 | 8.895 0410 | 35 |
| 26 | 8.886 9000 | 8.888 5458 | 8.890 1854 | 8.891 8190 | 8.893 4465 | 8.895 0680 | 34 |
| 27 | 8.886 9275 | 8.888 5732 | 8.890 2127 | 8.891 8462 | 8.893 4735 | 8.895 0949 | 33 |
| 28 | 8.886 9550 | 8.888 6006 | 8.890 2400 | 8.891 8733 | 8.893 5006 | 8.895 1219 | 32 |
| 29 | 8.886 9825 | 8.888 6279 | 8.890 2673 | 8.891 9005 | 8.893 5277 | 8.895 1489 | 31 |
| 30 | 8.887 0100 | 8.888 6553 | 8.890 2945 | 8.891 9277 | 8.893 5548 | 8.895 1758 | 30 |
| 31 | 8.887 0374 | 8.888 6827 | 8.890 3218 | 8.891 9548 | 8.893 5818 | 8.895 2028 | 29 |
| 32 | 8.887 0649 | 8.888 7100 | 8.890 3491 | 8.891 9820 | 8.893 6089 | 8.895 2298 | 28 |
| 33 | 8.887 0924 | 8.888 7374 | 8.890 3763 | 8.892 0092 | 8.893 6360 | 8.895 2567 | 27 |
| 34 | 8.887 1198 | 8.888 7648 | 8.890 4036 | 8.892 0363 | 8.893 6630 | 8.895 2837 | 26 |
| 35 | 8.887 1473 | 8.888 7921 | 8.890 4309 | 8.892 0635 | 8.893 6901 | 8.895 3107 | 25 |
| 36 | 8.887 1748 | 8.888 8195 | 8.890 4581 | 8.892 0906 | 8.893 7171 | 8.895 3376 | 24 |
| 37 | 8.887 2022 | 8.888 8469 | 8.890 4854 | 8.892 1178 | 8.893 7442 | 8.895 3646 | 23 |
| 38 | 8.887 2297 | 8.888 8742 | 8.890 5126 | 8.892 1450 | 8.893 7712 | 8.895 3915 | 22 |
| 39 | 8.887 2571 | 8.888 9016 | 8.890 5399 | 8.892 1721 | 8.893 7983 | 8.895 4185 | 21 |
| 40 | 8.887 2846 | 8.888 9289 | 8.890 5671 | 8.892 1993 | 8.893 8254 | 8.895 4454 | 20 |
| 41 | 8.887 3121 | 8.888 9563 | 8.890 5944 | 8.892 2264 | 8.893 8524 | 8.895 4724 | 19 |
| 42 | 8.887 3395 | 8.888 9836 | 8.890 6216 | 8.892 2536 | 8.893 8795 | 8.895 4993 | 18 |
| 43 | 8.887 3670 | 8.889 0110 | 8.890 6489 | 8.892 2807 | 8.893 9065 | 8.895 5263 | 17 |
| 44 | 8.887 3944 | 8.889 0383 | 8.890 6761 | 8.892 3079 | 8.893 9335 | 8.895 5532 | 16 |
| 45 | 8.887 4219 | 8.889 0657 | 8.890 7034 | 8.892 3350 | 8.893 9606 | 8.895 5802 | 15 |
| 46 | 8.887 4493 | 8.889 0930 | 8.890 7306 | 8.892 3621 | 8.893 9876 | 8.895 6071 | 14 |
| 47 | 8.887 4768 | 8.889 1204 | 8.890 7579 | 8.892 3893 | 8.894 0147 | 8.895 6341 | 13 |
| 48 | 8.887 5042 | 8.889 1477 | 8.890 7851 | 8.892 4164 | 8.894 0417 | 8.895 6610 | 12 |
| 49 | 8.887 5316 | 8.889 1751 | 8.890 8123 | 8.892 4436 | 8.894 0687 | 8.895 6879 | 11 |
| 50 | 8.887 5591 | 8.889 2024 | 8.890 8396 | 8.892 4707 | 8.894 0958 | 8.895 7149 | 10 |
| 51 | 8.887 5865 | 8.889 2297 | 8.890 8668 | 8.892 4978 | 8.894 1228 | 8.895 7418 | 9  |
| 52 | 8.887 6140 | 8.889 2571 | 8.890 8941 | 8.892 5250 | 8.894 1498 | 8.895 7687 | 8  |
| 53 | 8.887 6414 | 8.889 2844 | 8.890 9213 | 8.892 5521 | 8.894 1769 | 8.895 7957 | 7  |
| 54 | 8.887 6688 | 8.889 3117 | 8.890 9485 | 8.892 5792 | 8.894 2039 | 8.895 8226 | 6  |
| 55 | 8.887 6963 | 8.889 3391 | 8.890 9757 | 8.892 6064 | 8.894 2309 | 8.895 8495 | 5  |
| 56 | 8.887 7237 | 8.889 3664 | 8.891 0030 | 8.892 6335 | 8.894 2580 | 8.895 8765 | 4  |
| 57 | 8.887 7511 | 8.889 3937 | 8.891 0302 | 8.892 6606 | 8.894 2850 | 8.895 9034 | 3  |
| 58 | 8.887 7786 | 8.889 4210 | 8.891 0574 | 8.892 6877 | 8.894 3120 | 8.895 9303 | 2  |
| 59 | 8.887 8060 | 8.889 4484 | 8.891 0846 | 8.892 7148 | 8.894 3390 | 8.895 9572 | 1  |
| 60 | 8.887 8334 | 8.889 4757 | 8.891 1119 | 8.892 7420 | 8.894 3660 | 8.895 9842 | 0  |
| "  | 35'        | 34'        | 33'        | 32'        | 31'        | 30'        | "  |



| "   | 30'        | 31'        | 32'        | 33'        | 34'        | 35'        | "   |
|-----|------------|------------|------------|------------|------------|------------|-----|
| 0   | 8.894 6413 | 8.896 2455 | 8.897 8418 | 8.899 4375 | 8.901 0329 | 8.902 6285 | 60  |
| 1   | 8.894 6701 | 8.896 2733 | 8.897 8684 | 8.899 4637 | 8.901 0581 | 8.902 6535 | 59  |
| 2   | 8.894 6988 | 8.896 3020 | 8.897 8970 | 8.899 4924 | 8.901 0868 | 8.902 6822 | 58  |
| 3   | 8.894 7236 | 8.896 3255 | 8.897 9218 | 8.899 5172 | 8.901 1116 | 8.902 7070 | 57  |
| 4   | 8.894 7501 | 8.896 3521 | 8.897 9484 | 8.899 5438 | 8.901 1382 | 8.902 7336 | 56  |
| 5   | 8.894 7770 | 8.896 3788 | 8.897 9751 | 8.899 5705 | 8.901 1649 | 8.902 7603 | 55  |
| 6   | 8.894 8038 | 8.896 4054 | 8.898 0018 | 8.899 5972 | 8.901 1916 | 8.902 7870 | 54  |
| 7   | 8.894 8305 | 8.896 4320 | 8.898 0285 | 8.899 6239 | 8.901 2183 | 8.902 8137 | 53  |
| 8   | 8.894 8571 | 8.896 4587 | 8.898 0552 | 8.899 6506 | 8.901 2450 | 8.902 8404 | 52  |
| 9   | 8.894 8840 | 8.896 4854 | 8.898 0819 | 8.899 6773 | 8.901 2717 | 8.902 8671 | 51  |
| 10  | 8.894 9107 | 8.896 5120 | 8.898 1086 | 8.899 7040 | 8.901 2984 | 8.902 8938 | 50  |
| 11  | 8.894 9375 | 8.896 5386 | 8.898 1353 | 8.899 7307 | 8.901 3251 | 8.902 9205 | 49  |
| 12  | 8.894 9642 | 8.896 5652 | 8.898 1620 | 8.899 7574 | 8.901 3518 | 8.902 9472 | 48  |
| 13  | 8.894 9909 | 8.896 5919 | 8.898 1887 | 8.899 7841 | 8.901 3785 | 8.902 9739 | 47  |
| 14  | 8.895 0177 | 8.896 6185 | 8.898 2154 | 8.899 8108 | 8.901 4052 | 8.903 0006 | 46  |
| 15  | 8.895 0444 | 8.896 6452 | 8.898 2421 | 8.899 8375 | 8.901 4319 | 8.903 0273 | 45  |
| 16  | 8.895 0711 | 8.896 6718 | 8.898 2688 | 8.899 8642 | 8.901 4586 | 8.903 0540 | 44  |
| 17  | 8.895 0979 | 8.896 6985 | 8.898 2955 | 8.899 8909 | 8.901 4853 | 8.903 0807 | 43  |
| 18  | 8.895 1246 | 8.896 7251 | 8.898 3222 | 8.899 9176 | 8.901 5120 | 8.903 1074 | 42  |
| 19  | 8.895 1513 | 8.896 7518 | 8.898 3489 | 8.899 9443 | 8.901 5387 | 8.903 1341 | 41  |
| 20  | 8.895 1780 | 8.896 7784 | 8.898 3756 | 8.899 9710 | 8.901 5654 | 8.903 1608 | 40  |
| 21  | 8.895 2047 | 8.896 8051 | 8.898 4023 | 8.899 9977 | 8.901 5921 | 8.903 1875 | 39  |
| 22  | 8.895 2315 | 8.896 8318 | 8.898 4290 | 8.900 0244 | 8.901 6188 | 8.903 2142 | 38  |
| 23  | 8.895 2582 | 8.896 8584 | 8.898 4557 | 8.900 0511 | 8.901 6455 | 8.903 2409 | 37  |
| 24  | 8.895 2849 | 8.896 8851 | 8.898 4824 | 8.900 0778 | 8.901 6722 | 8.903 2676 | 36  |
| 25  | 8.895 3116 | 8.896 9118 | 8.898 5091 | 8.900 1045 | 8.901 6989 | 8.903 2943 | 35  |
| 26  | 8.895 3383 | 8.896 9385 | 8.898 5358 | 8.900 1312 | 8.901 7256 | 8.903 3210 | 34  |
| 27  | 8.895 3650 | 8.896 9651 | 8.898 5625 | 8.900 1579 | 8.901 7523 | 8.903 3477 | 33  |
| 28  | 8.895 3917 | 8.896 9918 | 8.898 5892 | 8.900 1846 | 8.901 7790 | 8.903 3744 | 32  |
| 29  | 8.895 4184 | 8.897 0185 | 8.898 6159 | 8.900 2113 | 8.901 8057 | 8.903 4011 | 31  |
| 30  | 8.895 4451 | 8.897 0452 | 8.898 6426 | 8.900 2380 | 8.901 8324 | 8.903 4278 | 30  |
| 31  | 8.895 4719 | 8.897 0719 | 8.898 6693 | 8.900 2647 | 8.901 8591 | 8.903 4545 | 29  |
| 32  | 8.895 4986 | 8.897 0986 | 8.898 6960 | 8.900 2914 | 8.901 8858 | 8.903 4812 | 28  |
| 33  | 8.895 5253 | 8.897 1253 | 8.898 7227 | 8.900 3181 | 8.901 9125 | 8.903 5079 | 27  |
| 34  | 8.895 5520 | 8.897 1520 | 8.898 7494 | 8.900 3448 | 8.901 9392 | 8.903 5346 | 26  |
| 35  | 8.895 5787 | 8.897 1787 | 8.898 7761 | 8.900 3715 | 8.901 9659 | 8.903 5613 | 25  |
| 36  | 8.895 6054 | 8.897 2054 | 8.898 8028 | 8.900 3982 | 8.901 9926 | 8.903 5880 | 24  |
| 37  | 8.895 6321 | 8.897 2321 | 8.898 8295 | 8.900 4249 | 8.902 0193 | 8.903 6147 | 23  |
| 38  | 8.895 6588 | 8.897 2588 | 8.898 8562 | 8.900 4516 | 8.902 0460 | 8.903 6414 | 22  |
| 39  | 8.895 6855 | 8.897 2855 | 8.898 8829 | 8.900 4783 | 8.902 0727 | 8.903 6681 | 21  |
| 40  | 8.895 7122 | 8.897 3122 | 8.898 9096 | 8.900 5050 | 8.902 0994 | 8.903 6948 | 20  |
| 41  | 8.895 7389 | 8.897 3389 | 8.898 9363 | 8.900 5317 | 8.902 1261 | 8.903 7215 | 19  |
| 42  | 8.895 7656 | 8.897 3656 | 8.898 9630 | 8.900 5584 | 8.902 1528 | 8.903 7482 | 18  |
| 43  | 8.895 7923 | 8.897 3923 | 8.898 9897 | 8.900 5851 | 8.902 1795 | 8.903 7749 | 17  |
| 44  | 8.895 8190 | 8.897 4190 | 8.899 0164 | 8.900 6118 | 8.902 2062 | 8.903 8016 | 16  |
| 45  | 8.895 8457 | 8.897 4457 | 8.899 0431 | 8.900 6385 | 8.902 2329 | 8.903 8283 | 15  |
| 46  | 8.895 8724 | 8.897 4724 | 8.899 0698 | 8.900 6652 | 8.902 2596 | 8.903 8550 | 14  |
| 47  | 8.895 8991 | 8.897 4991 | 8.899 0965 | 8.900 6919 | 8.902 2863 | 8.903 8817 | 13  |
| 48  | 8.895 9258 | 8.897 5258 | 8.899 1232 | 8.900 7186 | 8.902 3130 | 8.903 9084 | 12  |
| 49  | 8.895 9525 | 8.897 5525 | 8.899 1499 | 8.900 7453 | 8.902 3397 | 8.903 9351 | 11  |
| 50  | 8.895 9792 | 8.897 5792 | 8.899 1766 | 8.900 7720 | 8.902 3664 | 8.903 9618 | 10  |
| 51  | 8.896 0059 | 8.897 6059 | 8.899 2033 | 8.900 7987 | 8.902 3931 | 8.903 9885 | 9   |
| 52  | 8.896 0326 | 8.897 6326 | 8.899 2300 | 8.900 8254 | 8.902 4198 | 8.904 0152 | 8   |
| 53  | 8.896 0593 | 8.897 6593 | 8.899 2567 | 8.900 8521 | 8.902 4465 | 8.904 0419 | 7   |
| 54  | 8.896 0860 | 8.897 6860 | 8.899 2834 | 8.900 8788 | 8.902 4732 | 8.904 0686 | 6   |
| 55  | 8.896 1127 | 8.897 7127 | 8.899 3101 | 8.900 9055 | 8.902 4999 | 8.904 0953 | 5   |
| 56  | 8.896 1394 | 8.897 7394 | 8.899 3368 | 8.900 9322 | 8.902 5266 | 8.904 1220 | 4   |
| 57  | 8.896 1661 | 8.897 7661 | 8.899 3635 | 8.900 9589 | 8.902 5533 | 8.904 1487 | 3   |
| 58  | 8.896 1928 | 8.897 7928 | 8.899 3902 | 8.900 9856 | 8.902 5800 | 8.904 1754 | 2   |
| 59  | 8.896 2195 | 8.897 8195 | 8.899 4169 | 8.901 0123 | 8.902 6067 | 8.904 2021 | 1   |
| 60  | 8.896 2455 | 8.897 8418 | 8.899 4434 | 8.901 0380 | 8.902 6324 | 8.904 2278 | 0   |
| 30' | 29'        | 28'        | 27'        | 26'        | 25'        | 24'        | 23' |



| "  | 30'        | 31'        | 32'        | 33'        | 34'        | 35'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.895 9842 | 8.897 5963 | 8.899 2026 | 8.900 8030 | 8.902 3977 | 8.903 9866 | 60 |
| 1  | 8.896 0111 | 8.897 6231 | 8.899 2293 | 8.900 8297 | 8.902 4242 | 8.904 0130 | 59 |
| 2  | 8.896 0380 | 8.897 6500 | 8.899 2560 | 8.900 8563 | 8.902 4507 | 8.904 0394 | 58 |
| 3  | 8.896 0649 | 8.897 6768 | 8.899 2828 | 8.900 8829 | 8.902 4773 | 8.904 0659 | 57 |
| 4  | 8.896 0918 | 8.897 7036 | 8.899 3095 | 8.900 9095 | 8.902 5038 | 8.904 0923 | 56 |
| 5  | 8.896 1187 | 8.897 7304 | 8.899 3362 | 8.900 9362 | 8.902 5303 | 8.904 1187 | 55 |
| 6  | 8.896 1456 | 8.897 7572 | 8.899 3629 | 8.900 9628 | 8.902 5568 | 8.904 1451 | 54 |
| 7  | 8.896 1725 | 8.897 7840 | 8.899 3896 | 8.900 9894 | 8.902 5833 | 8.904 1716 | 53 |
| 8  | 8.896 1994 | 8.897 8108 | 8.899 4163 | 8.901 0160 | 8.902 6099 | 8.904 1980 | 52 |
| 9  | 8.896 2264 | 8.897 8376 | 8.899 4430 | 8.901 0426 | 8.902 6364 | 8.904 2244 | 51 |
| 10 | 8.896 2533 | 8.897 8644 | 8.899 4698 | 8.901 0692 | 8.902 6629 | 8.904 2508 | 50 |
| 11 | 8.896 2802 | 8.897 8912 | 8.899 4965 | 8.901 0958 | 8.902 6894 | 8.904 2772 | 49 |
| 12 | 8.896 3071 | 8.897 9181 | 8.899 5232 | 8.901 1224 | 8.902 7159 | 8.904 3036 | 48 |
| 13 | 8.896 3340 | 8.897 9449 | 8.899 5499 | 8.901 1490 | 8.902 7424 | 8.904 3301 | 47 |
| 14 | 8.896 3609 | 8.897 9716 | 8.899 5766 | 8.901 1756 | 8.902 7689 | 8.904 3565 | 46 |
| 15 | 8.896 3877 | 8.897 9984 | 8.899 6033 | 8.901 2022 | 8.902 7954 | 8.904 3829 | 45 |
| 16 | 8.896 4146 | 8.898 0252 | 8.899 6300 | 8.901 2288 | 8.902 8219 | 8.904 4093 | 44 |
| 17 | 8.896 4415 | 8.898 0520 | 8.899 6567 | 8.901 2554 | 8.902 8484 | 8.904 4357 | 43 |
| 18 | 8.896 4684 | 8.898 0788 | 8.899 6834 | 8.901 2820 | 8.902 8749 | 8.904 4621 | 42 |
| 19 | 8.896 4953 | 8.898 1056 | 8.899 7100 | 8.901 3086 | 8.902 9014 | 8.904 4885 | 41 |
| 20 | 8.896 5222 | 8.898 1324 | 8.899 7367 | 8.901 3352 | 8.902 9279 | 8.904 5149 | 40 |
| 21 | 8.896 5491 | 8.898 1592 | 8.899 7634 | 8.901 3618 | 8.902 9544 | 8.904 5413 | 39 |
| 22 | 8.896 5760 | 8.898 1860 | 8.899 7901 | 8.901 3884 | 8.902 9809 | 8.904 5677 | 38 |
| 23 | 8.896 6028 | 8.898 2128 | 8.899 8168 | 8.901 4150 | 8.903 0074 | 8.904 5941 | 37 |
| 24 | 8.896 6297 | 8.898 2395 | 8.899 8435 | 8.901 4416 | 8.903 0339 | 8.904 6205 | 36 |
| 25 | 8.896 6566 | 8.898 2663 | 8.899 8702 | 8.901 4682 | 8.903 0604 | 8.904 6469 | 35 |
| 26 | 8.896 6835 | 8.898 2931 | 8.899 8968 | 8.901 4948 | 8.903 0869 | 8.904 6733 | 34 |
| 27 | 8.896 7104 | 8.898 3199 | 8.899 9235 | 8.901 5213 | 8.903 1134 | 8.904 6997 | 33 |
| 28 | 8.896 7372 | 8.898 3467 | 8.899 9502 | 8.901 5479 | 8.903 1399 | 8.904 7261 | 32 |
| 29 | 8.896 7641 | 8.898 3734 | 8.899 9769 | 8.901 5745 | 8.903 1664 | 8.904 7525 | 31 |
| 30 | 8.896 7910 | 8.898 4002 | 8.900 0036 | 8.901 6011 | 8.903 1928 | 8.904 7788 | 30 |
| 31 | 8.896 8178 | 8.898 4270 | 8.900 0302 | 8.901 6277 | 8.903 2193 | 8.904 8052 | 29 |
| 32 | 8.896 8447 | 8.898 4537 | 8.900 0569 | 8.901 6542 | 8.903 2458 | 8.904 8316 | 28 |
| 33 | 8.896 8716 | 8.898 4805 | 8.900 0836 | 8.901 6808 | 8.903 2723 | 8.904 8580 | 27 |
| 34 | 8.896 8984 | 8.898 5073 | 8.900 1102 | 8.901 7074 | 8.903 2988 | 8.904 8844 | 26 |
| 35 | 8.896 9253 | 8.898 5340 | 8.900 1369 | 8.901 7340 | 8.903 3252 | 8.904 9108 | 25 |
| 36 | 8.896 9522 | 8.898 5608 | 8.900 1636 | 8.901 7605 | 8.903 3517 | 8.904 9371 | 24 |
| 37 | 8.896 9790 | 8.898 5876 | 8.900 1902 | 8.901 7871 | 8.903 3782 | 8.904 9635 | 23 |
| 38 | 8.897 0059 | 8.898 6143 | 8.900 2169 | 8.901 8137 | 8.903 4046 | 8.904 9899 | 22 |
| 39 | 8.897 0327 | 8.898 6411 | 8.900 2436 | 8.901 8402 | 8.903 4311 | 8.905 0163 | 21 |
| 40 | 8.897 0596 | 8.898 6678 | 8.900 2702 | 8.901 8668 | 8.903 4576 | 8.905 0426 | 20 |
| 41 | 8.897 0864 | 8.898 6946 | 8.900 2969 | 8.901 8933 | 8.903 4840 | 8.905 0690 | 19 |
| 42 | 8.897 1133 | 8.898 7213 | 8.900 3235 | 8.901 9199 | 8.903 5105 | 8.905 0954 | 18 |
| 43 | 8.897 1401 | 8.898 7481 | 8.900 3502 | 8.901 9465 | 8.903 5370 | 8.905 1217 | 17 |
| 44 | 8.897 1670 | 8.898 7748 | 8.900 3768 | 8.901 9730 | 8.903 5634 | 8.905 1481 | 16 |
| 45 | 8.897 1938 | 8.898 8016 | 8.900 4035 | 8.901 9996 | 8.903 5899 | 8.905 1745 | 15 |
| 46 | 8.897 2207 | 8.898 8283 | 8.900 4301 | 8.902 0261 | 8.903 6163 | 8.905 2008 | 14 |
| 47 | 8.897 2475 | 8.898 8551 | 8.900 4568 | 8.902 0527 | 8.903 6428 | 8.905 2272 | 13 |
| 48 | 8.897 2744 | 8.898 8818 | 8.900 4834 | 8.902 0792 | 8.903 6692 | 8.905 2535 | 12 |
| 49 | 8.897 3012 | 8.898 9086 | 8.900 5101 | 8.902 1058 | 8.903 6957 | 8.905 2799 | 11 |
| 50 | 8.897 3280 | 8.898 9353 | 8.900 5367 | 8.902 1323 | 8.903 7221 | 8.905 3063 | 10 |
| 51 | 8.897 3549 | 8.898 9620 | 8.900 5634 | 8.902 1589 | 8.903 7486 | 8.905 3326 | 9  |
| 52 | 8.897 3817 | 8.898 9888 | 8.900 5900 | 8.902 1854 | 8.903 7750 | 8.905 3590 | 8  |
| 53 | 8.897 4085 | 8.899 0155 | 8.900 6166 | 8.902 2119 | 8.903 8015 | 8.905 3853 | 7  |
| 54 | 8.897 4354 | 8.899 0422 | 8.900 6433 | 8.902 2385 | 8.903 8279 | 8.905 4117 | 6  |
| 55 | 8.897 4622 | 8.899 0690 | 8.900 6699 | 8.902 2650 | 8.903 8544 | 8.905 4380 | 5  |
| 56 | 8.897 4890 | 8.899 0957 | 8.900 6965 | 8.902 2916 | 8.903 8808 | 8.905 4643 | 4  |
| 57 | 8.897 5159 | 8.899 1224 | 8.900 7232 | 8.902 3181 | 8.903 9073 | 8.905 4907 | 3  |
| 58 | 8.897 5427 | 8.899 1492 | 8.900 7498 | 8.902 3446 | 8.903 9337 | 8.905 5170 | 2  |
| 59 | 8.897 5695 | 8.899 1759 | 8.900 7764 | 8.902 3712 | 8.903 9601 | 8.905 5434 | 1  |
| 60 | 8.897 5963 | 8.899 2026 | 8.900 8030 | 8.902 3977 | 8.903 9866 | 8.905 5697 | 0  |
| "  | 29'        | 28'        | 27'        | 26'        | 25'        | 24'        | "  |



| "  | 36'        | 37'        | 38'        | 39'        | 40'        | 41'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.903 1685 | 8.903 7338 | 8.904 2974 | 8.904 8615 | 8.905 4259 | 8.905 9902 | 60 |
| 1  | 8.904 1947 | 8.904 7600 | 8.905 3244 | 8.905 8887 | 8.906 4532 | 8.907 0175 | 59 |
| 2  | 8.904 2209 | 8.904 7862 | 8.905 3506 | 8.905 9149 | 8.906 4794 | 8.907 0437 | 58 |
| 3  | 8.904 2470 | 8.904 8124 | 8.905 3768 | 8.906 9411 | 8.906 5056 | 8.907 0699 | 57 |
| 4  | 8.904 2732 | 8.904 8386 | 8.905 4030 | 8.906 9673 | 8.906 5318 | 8.907 0961 | 56 |
| 5  | 8.904 2994 | 8.904 8648 | 8.905 4292 | 8.906 9935 | 8.906 5580 | 8.907 1223 | 55 |
| 6  | 8.904 3255 | 8.904 8910 | 8.905 4554 | 8.907 0197 | 8.906 5842 | 8.907 1485 | 54 |
| 7  | 8.904 3517 | 8.904 9172 | 8.905 4816 | 8.907 0459 | 8.906 6104 | 8.907 1747 | 53 |
| 8  | 8.904 3778 | 8.904 9434 | 8.905 5078 | 8.907 0721 | 8.906 6366 | 8.907 2009 | 52 |
| 9  | 8.904 4040 | 8.904 9696 | 8.905 5340 | 8.907 0983 | 8.906 6628 | 8.907 2271 | 51 |
| 10 | 8.904 4302 | 8.904 9958 | 8.905 5602 | 8.907 1245 | 8.906 6890 | 8.907 2533 | 50 |
| 11 | 8.904 4564 | 8.905 0220 | 8.905 5864 | 8.907 1507 | 8.906 7152 | 8.907 2795 | 49 |
| 12 | 8.904 4825 | 8.905 0482 | 8.905 6126 | 8.907 1769 | 8.906 7414 | 8.907 3057 | 48 |
| 13 | 8.904 5086 | 8.905 0744 | 8.905 6388 | 8.907 2031 | 8.906 7676 | 8.907 3319 | 47 |
| 14 | 8.904 5348 | 8.905 1006 | 8.905 6650 | 8.907 2293 | 8.906 7938 | 8.907 3581 | 46 |
| 15 | 8.904 5609 | 8.905 1268 | 8.905 6912 | 8.907 2555 | 8.906 8200 | 8.907 3843 | 45 |
| 16 | 8.904 5870 | 8.905 1530 | 8.905 7174 | 8.907 2817 | 8.906 8462 | 8.907 4105 | 44 |
| 17 | 8.904 6132 | 8.905 1792 | 8.905 7436 | 8.907 3079 | 8.906 8724 | 8.907 4367 | 43 |
| 18 | 8.904 6394 | 8.905 2054 | 8.905 7698 | 8.907 3341 | 8.906 8986 | 8.907 4629 | 42 |
| 19 | 8.904 6655 | 8.905 2316 | 8.905 7960 | 8.907 3603 | 8.906 9248 | 8.907 4891 | 41 |
| 20 | 8.904 6916 | 8.905 2578 | 8.905 8222 | 8.907 3865 | 8.906 9510 | 8.907 5153 | 40 |
| 21 | 8.904 7177 | 8.905 2840 | 8.905 8484 | 8.907 4127 | 8.906 9772 | 8.907 5415 | 39 |
| 22 | 8.904 7439 | 8.905 3102 | 8.905 8746 | 8.907 4389 | 8.907 0034 | 8.907 5677 | 38 |
| 23 | 8.904 7700 | 8.905 3364 | 8.905 9008 | 8.907 4651 | 8.907 0296 | 8.907 5939 | 37 |
| 24 | 8.904 7961 | 8.905 3626 | 8.905 9270 | 8.907 4913 | 8.907 0558 | 8.907 6201 | 36 |
| 25 | 8.904 8223 | 8.905 3888 | 8.905 9532 | 8.907 5175 | 8.907 0820 | 8.907 6463 | 35 |
| 26 | 8.904 8484 | 8.905 4150 | 8.905 9794 | 8.907 5437 | 8.907 1082 | 8.907 6725 | 34 |
| 27 | 8.904 8745 | 8.905 4412 | 8.906 0056 | 8.907 5699 | 8.907 1344 | 8.907 6987 | 33 |
| 28 | 8.904 9007 | 8.905 4674 | 8.906 0318 | 8.907 5961 | 8.907 1606 | 8.907 7249 | 32 |
| 29 | 8.904 9268 | 8.905 4936 | 8.906 0580 | 8.907 6223 | 8.907 1868 | 8.907 7511 | 31 |
| 30 | 8.904 9529 | 8.905 5198 | 8.906 0842 | 8.907 6485 | 8.907 2130 | 8.907 7773 | 30 |
| 31 | 8.904 9790 | 8.905 5460 | 8.906 1104 | 8.907 6747 | 8.907 2392 | 8.907 8035 | 29 |
| 32 | 8.905 0051 | 8.905 5722 | 8.906 1366 | 8.907 7009 | 8.907 2654 | 8.907 8297 | 28 |
| 33 | 8.905 0313 | 8.905 5984 | 8.906 1628 | 8.907 7271 | 8.907 2916 | 8.907 8559 | 27 |
| 34 | 8.905 0574 | 8.905 6246 | 8.906 1890 | 8.907 7533 | 8.907 3178 | 8.907 8821 | 26 |
| 35 | 8.905 0835 | 8.905 6508 | 8.906 2152 | 8.907 7795 | 8.907 3440 | 8.907 9083 | 25 |
| 36 | 8.905 1096 | 8.905 6770 | 8.906 2414 | 8.907 8057 | 8.907 3702 | 8.907 9345 | 24 |
| 37 | 8.905 1357 | 8.905 6995 | 8.906 2676 | 8.907 8319 | 8.907 3964 | 8.907 9607 | 23 |
| 38 | 8.905 1618 | 8.905 7257 | 8.906 2938 | 8.907 8581 | 8.907 4226 | 8.907 9869 | 22 |
| 39 | 8.905 1879 | 8.905 7519 | 8.906 3200 | 8.907 8843 | 8.907 4488 | 8.908 0131 | 21 |
| 40 | 8.905 2140 | 8.905 7781 | 8.906 3462 | 8.907 9105 | 8.907 4750 | 8.908 0393 | 20 |
| 41 | 8.905 2401 | 8.905 8043 | 8.906 3724 | 8.907 9367 | 8.907 5012 | 8.908 0655 | 19 |
| 42 | 8.905 2662 | 8.905 8305 | 8.906 3986 | 8.907 9629 | 8.907 5274 | 8.908 0917 | 18 |
| 43 | 8.905 2924 | 8.905 8567 | 8.906 4248 | 8.907 9891 | 8.907 5536 | 8.908 1179 | 17 |
| 44 | 8.905 3185 | 8.905 8829 | 8.906 4510 | 8.908 0153 | 8.907 5798 | 8.908 1441 | 16 |
| 45 | 8.905 3446 | 8.905 9091 | 8.906 4772 | 8.908 0415 | 8.907 6060 | 8.908 1703 | 15 |
| 46 | 8.905 3707 | 8.905 9353 | 8.906 5034 | 8.908 0677 | 8.907 6322 | 8.908 1965 | 14 |
| 47 | 8.905 3967 | 8.905 9615 | 8.906 5296 | 8.908 0939 | 8.907 6584 | 8.908 2227 | 13 |
| 48 | 8.905 4228 | 8.905 9877 | 8.906 5558 | 8.908 1201 | 8.907 6846 | 8.908 2489 | 12 |
| 49 | 8.905 4489 | 8.906 0139 | 8.906 5820 | 8.908 1463 | 8.907 7108 | 8.908 2751 | 11 |
| 50 | 8.905 4750 | 8.906 0401 | 8.906 6082 | 8.908 1725 | 8.907 7370 | 8.908 3013 | 10 |
| 51 | 8.905 5011 | 8.906 0663 | 8.906 6344 | 8.908 1987 | 8.907 7632 | 8.908 3275 | 9  |
| 52 | 8.905 5272 | 8.906 0925 | 8.906 6606 | 8.908 2249 | 8.907 7894 | 8.908 3537 | 8  |
| 53 | 8.905 5533 | 8.906 1187 | 8.906 6868 | 8.908 2511 | 8.907 8156 | 8.908 3799 | 7  |
| 54 | 8.905 5794 | 8.906 1449 | 8.906 7130 | 8.908 2773 | 8.907 8418 | 8.908 4061 | 6  |
| 55 | 8.905 6055 | 8.906 1711 | 8.906 7392 | 8.908 3035 | 8.907 8680 | 8.908 4323 | 5  |
| 56 | 8.905 6315 | 8.906 1973 | 8.906 7654 | 8.908 3297 | 8.907 8942 | 8.908 4585 | 4  |
| 57 | 8.905 6576 | 8.906 2235 | 8.906 7916 | 8.908 3559 | 8.907 9204 | 8.908 4847 | 3  |
| 58 | 8.905 6837 | 8.906 2497 | 8.906 8178 | 8.908 3821 | 8.907 9466 | 8.908 5109 | 2  |
| 59 | 8.905 7098 | 8.906 2759 | 8.906 8440 | 8.908 4083 | 8.907 9728 | 8.908 5371 | 1  |
| 60 | 8.905 7358 | 8.906 2975 | 8.906 8655 | 8.908 4345 | 8.908 0000 | 8.908 5633 | 0  |
| 61 | 8.905 7619 | 8.906 3237 | 8.906 8917 | 8.908 4607 | 8.908 0262 | 8.908 5895 | 59 |
| 62 | 8.905 7880 | 8.906 3499 | 8.906 9179 | 8.908 4869 | 8.908 0524 | 8.908 6157 | 58 |
| 63 | 8.905 8141 | 8.906 3761 | 8.906 9441 | 8.908 5131 | 8.908 0786 | 8.908 6419 | 57 |
| 64 | 8.905 8402 | 8.906 4023 | 8.906 9703 | 8.908 5393 | 8.908 1048 | 8.908 6681 | 56 |
| 65 | 8.905 8663 | 8.906 4285 | 8.907 0000 | 8.908 5655 | 8.908 1310 | 8.908 6943 | 55 |
| 66 | 8.905 8924 | 8.906 4547 | 8.907 0262 | 8.908 5917 | 8.908 1572 | 8.908 7205 | 54 |
| 67 | 8.905 9185 | 8.906 4809 | 8.907 0524 | 8.908 6179 | 8.908 1834 | 8.908 7467 | 53 |
| 68 | 8.905 9446 | 8.906 5071 | 8.907 0786 | 8.908 6441 | 8.908 2096 | 8.908 7729 | 52 |
| 69 | 8.905 9707 | 8.906 5333 | 8.907 1048 | 8.908 6703 | 8.908 2358 | 8.908 7991 | 51 |
| 70 | 8.905 9968 | 8.906 5595 | 8.907 1310 | 8.908 6965 | 8.908 2620 | 8.908 8253 | 50 |



| "  | 36'        | 37'        | 38'        | 39'        | 40'        | 41'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.905 5697 | 8.907 1472 | 8.908 7190 | 8.910 2853 | 8.911 8460 | 8.913 4012 | 60 |
| 1  | 8.905 5961 | 8.907 1734 | 8.908 7452 | 8.910 3114 | 8.911 8720 | 8.913 4270 | 59 |
| 2  | 8.905 6224 | 8.907 1997 | 8.908 7713 | 8.910 3374 | 8.911 8979 | 8.913 4529 | 58 |
| 3  | 8.905 6487 | 8.907 2259 | 8.908 7975 | 8.910 3635 | 8.911 9239 | 8.913 4788 | 57 |
| 4  | 8.905 6751 | 8.907 2522 | 8.908 8236 | 8.910 3895 | 8.911 9498 | 8.913 5047 | 56 |
| 5  | 8.905 7014 | 8.907 2784 | 8.908 8498 | 8.910 4156 | 8.911 9758 | 8.913 5305 | 55 |
| 6  | 8.905 7277 | 8.907 3046 | 8.908 8759 | 8.910 4416 | 8.912 0018 | 8.913 5564 | 54 |
| 7  | 8.905 7540 | 8.907 3309 | 8.908 9021 | 8.910 4677 | 8.912 0277 | 8.913 5823 | 53 |
| 8  | 8.905 7804 | 8.907 3571 | 8.908 9282 | 8.910 4937 | 8.912 0537 | 8.913 6081 | 52 |
| 9  | 8.905 8067 | 8.907 3833 | 8.908 9543 | 8.910 5198 | 8.912 0796 | 8.913 6340 | 51 |
| 10 | 8.905 8330 | 8.907 4096 | 8.908 9805 | 8.910 5458 | 8.912 1056 | 8.913 6598 | 50 |
| 11 | 8.905 8593 | 8.907 4358 | 8.909 0066 | 8.910 5718 | 8.912 1315 | 8.913 6857 | 49 |
| 12 | 8.905 8857 | 8.907 4620 | 8.909 0327 | 8.910 5979 | 8.912 1575 | 8.913 7116 | 48 |
| 13 | 8.905 9120 | 8.907 4882 | 8.909 0589 | 8.910 6239 | 8.912 1834 | 8.913 7374 | 47 |
| 14 | 8.905 9383 | 8.907 5145 | 8.909 0850 | 8.910 6500 | 8.912 2094 | 8.913 7633 | 46 |
| 15 | 8.905 9646 | 8.907 5407 | 8.909 1111 | 8.910 6760 | 8.912 2353 | 8.913 7891 | 45 |
| 16 | 8.905 9909 | 8.907 5669 | 8.909 1373 | 8.910 7020 | 8.912 2612 | 8.913 8150 | 44 |
| 17 | 8.906 0172 | 8.907 5931 | 8.909 1634 | 8.910 7281 | 8.912 2872 | 8.913 8408 | 43 |
| 18 | 8.906 0436 | 8.907 6193 | 8.909 1895 | 8.910 7541 | 8.912 3131 | 8.913 8667 | 42 |
| 19 | 8.906 0699 | 8.907 6456 | 8.909 2156 | 8.910 7801 | 8.912 3391 | 8.913 8925 | 41 |
| 20 | 8.906 0962 | 8.907 6718 | 8.909 2417 | 8.910 8061 | 8.912 3650 | 8.913 9183 | 40 |
| 21 | 8.906 1225 | 8.907 6980 | 8.909 2679 | 8.910 8322 | 8.912 3909 | 8.913 9442 | 39 |
| 22 | 8.906 1488 | 8.907 7242 | 8.909 2940 | 8.910 8582 | 8.912 4169 | 8.913 9700 | 38 |
| 23 | 8.906 1751 | 8.907 7504 | 8.909 3201 | 8.910 8842 | 8.912 4428 | 8.913 9959 | 37 |
| 24 | 8.906 2014 | 8.907 7766 | 8.909 3462 | 8.910 9102 | 8.912 4687 | 8.914 0217 | 36 |
| 25 | 8.906 2277 | 8.907 8028 | 8.909 3723 | 8.910 9363 | 8.912 4947 | 8.914 0475 | 35 |
| 26 | 8.906 2540 | 8.907 8290 | 8.909 3984 | 8.910 9623 | 8.912 5206 | 8.914 0734 | 34 |
| 27 | 8.906 2803 | 8.907 8552 | 8.909 4245 | 8.910 9883 | 8.912 5465 | 8.914 0992 | 33 |
| 28 | 8.906 3066 | 8.907 8814 | 8.909 4507 | 8.911 0143 | 8.912 5724 | 8.914 1250 | 32 |
| 29 | 8.906 3329 | 8.907 9076 | 8.909 4768 | 8.911 0403 | 8.912 5983 | 8.914 1509 | 31 |
| 30 | 8.906 3592 | 8.907 9338 | 8.909 5029 | 8.911 0663 | 8.912 6243 | 8.914 1767 | 30 |
| 31 | 8.906 3855 | 8.907 9600 | 8.909 5290 | 8.911 0923 | 8.912 6502 | 8.914 2025 | 29 |
| 32 | 8.906 4117 | 8.907 9862 | 8.909 5551 | 8.911 1184 | 8.912 6761 | 8.914 2284 | 28 |
| 33 | 8.906 4380 | 8.908 0124 | 8.909 5812 | 8.911 1444 | 8.912 7020 | 8.914 2542 | 27 |
| 34 | 8.906 4643 | 8.908 0386 | 8.909 6073 | 8.911 1704 | 8.912 7279 | 8.914 2800 | 26 |
| 35 | 8.906 4906 | 8.908 0648 | 8.909 6334 | 8.911 1964 | 8.912 7538 | 8.914 3058 | 25 |
| 36 | 8.906 5169 | 8.908 0910 | 8.909 6595 | 8.911 2224 | 8.912 7798 | 8.914 3317 | 24 |
| 37 | 8.906 5432 | 8.908 1172 | 8.909 6856 | 8.911 2484 | 8.912 8057 | 8.914 3575 | 23 |
| 38 | 8.906 5694 | 8.908 1434 | 8.909 7117 | 8.911 2744 | 8.912 8316 | 8.914 3833 | 22 |
| 39 | 8.906 5957 | 8.908 1695 | 8.909 7377 | 8.911 3004 | 8.912 8575 | 8.914 4091 | 21 |
| 40 | 8.906 6220 | 8.908 1957 | 8.909 7638 | 8.911 3264 | 8.912 8834 | 8.914 4349 | 20 |
| 41 | 8.906 6483 | 8.908 2219 | 8.909 7899 | 8.911 3524 | 8.912 9093 | 8.914 4607 | 19 |
| 42 | 8.906 6745 | 8.908 2481 | 8.909 8160 | 8.911 3784 | 8.912 9352 | 8.914 4865 | 18 |
| 43 | 8.906 7008 | 8.908 2743 | 8.909 8421 | 8.911 4044 | 8.912 9611 | 8.914 5124 | 17 |
| 44 | 8.906 7271 | 8.908 3004 | 8.909 8682 | 8.911 4303 | 8.912 9870 | 8.914 5382 | 16 |
| 45 | 8.906 7534 | 8.908 3266 | 8.909 8943 | 8.911 4563 | 8.913 0129 | 8.914 5640 | 15 |
| 46 | 8.906 7796 | 8.908 3528 | 8.909 9203 | 8.911 4823 | 8.913 0388 | 8.914 5898 | 14 |
| 47 | 8.906 8059 | 8.908 3790 | 8.909 9464 | 8.911 5083 | 8.913 0647 | 8.914 6156 | 13 |
| 48 | 8.906 8322 | 8.908 4051 | 8.909 9725 | 8.911 5343 | 8.913 0906 | 8.914 6414 | 12 |
| 49 | 8.906 8584 | 8.908 4313 | 8.909 9986 | 8.911 5603 | 8.913 1165 | 8.914 6672 | 11 |
| 50 | 8.906 8847 | 8.908 4575 | 8.910 0246 | 8.911 5863 | 8.913 1424 | 8.914 6930 | 10 |
| 51 | 8.906 9109 | 8.908 4836 | 8.910 0507 | 8.911 6122 | 8.913 1682 | 8.914 7188 | 9  |
| 52 | 8.906 9372 | 8.908 5098 | 8.910 0768 | 8.911 6382 | 8.913 1941 | 8.914 7446 | 8  |
| 53 | 8.906 9634 | 8.908 5360 | 8.910 1029 | 8.911 6642 | 8.913 2200 | 8.914 7704 | 7  |
| 54 | 8.906 9897 | 8.908 5621 | 8.910 1289 | 8.911 6902 | 8.913 2459 | 8.914 7962 | 6  |
| 55 | 8.907 0160 | 8.908 5883 | 8.910 1550 | 8.911 7161 | 8.913 2718 | 8.914 8220 | 5  |
| 56 | 8.907 0422 | 8.908 6144 | 8.910 1811 | 8.911 7421 | 8.913 2977 | 8.914 8477 | 4  |
| 57 | 8.907 0685 | 8.908 6406 | 8.910 2071 | 8.911 7681 | 8.913 3235 | 8.914 8735 | 3  |
| 58 | 8.907 0947 | 8.908 6667 | 8.910 2332 | 8.911 7941 | 8.913 3494 | 8.914 8993 | 2  |
| 59 | 8.907 1210 | 8.908 6929 | 8.910 2592 | 8.911 8200 | 8.913 3753 | 8.914 9251 | 1  |
| 60 | 8.907 1472 | 8.908 7190 | 8.910 2853 | 8.911 8460 | 8.913 4012 | 8.914 9509 | 0  |
| "  | 28'        | 22'        | 21'        | 20'        | 19'        | 18'        | "  |



| "  | 42'        | 43'        | 44'        | 45'        | 46'        | 47'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.913 4881 | 8.915 0219 | 8.916 5594 | 8.918 0743 | 8.919 5911 | 8.921 1044 | 60 |
| 1  | 8.913 5137 | 8.915 0474 | 8.916 6258 | 8.918 1407 | 8.919 6563 | 8.921 1700 | 59 |
| 2  | 8.913 5393 | 8.915 0730 | 8.916 6512 | 8.918 1661 | 8.919 6816 | 8.921 1957 | 58 |
| 3  | 8.913 5649 | 8.915 0985 | 8.916 6766 | 8.918 1914 | 8.919 7069 | 8.921 2210 | 57 |
| 4  | 8.913 5905 | 8.915 1240 | 8.916 7021 | 8.918 2167 | 8.919 7323 | 8.921 2460 | 56 |
| 5  | 8.913 6161 | 8.915 1495 | 8.916 7275 | 8.918 2421 | 8.919 7576 | 8.921 2714 | 55 |
| 6  | 8.913 6417 | 8.915 1750 | 8.916 7529 | 8.918 2674 | 8.919 7830 | 8.921 2968 | 54 |
| 7  | 8.913 6673 | 8.915 2005 | 8.916 7784 | 8.918 2927 | 8.919 8083 | 8.921 3221 | 53 |
| 8  | 8.913 6929 | 8.915 2260 | 8.916 8037 | 8.918 3180 | 8.919 8337 | 8.921 3475 | 52 |
| 9  | 8.913 7185 | 8.915 2515 | 8.916 8291 | 8.918 3434 | 8.919 8590 | 8.921 3728 | 51 |
| 10 | 8.913 7441 | 8.915 2770 | 8.916 8545 | 8.918 3687 | 8.919 8844 | 8.921 3982 | 50 |
| 11 | 8.913 7697 | 8.915 3025 | 8.916 8799 | 8.918 3940 | 8.919 9097 | 8.921 4235 | 49 |
| 12 | 8.913 7953 | 8.915 3280 | 8.916 9053 | 8.918 4194 | 8.919 9351 | 8.921 4489 | 48 |
| 13 | 8.913 8209 | 8.915 3535 | 8.916 9307 | 8.918 4447 | 8.919 9604 | 8.921 4742 | 47 |
| 14 | 8.913 8464 | 8.915 3790 | 8.916 9561 | 8.918 4701 | 8.919 9858 | 8.921 4996 | 46 |
| 15 | 8.913 8720 | 8.915 4045 | 8.916 9815 | 8.918 4954 | 8.920 0111 | 8.921 5249 | 45 |
| 16 | 8.913 8976 | 8.915 4300 | 8.917 0069 | 8.918 5208 | 8.920 0365 | 8.921 5503 | 44 |
| 17 | 8.913 9232 | 8.915 4555 | 8.917 0322 | 8.918 5461 | 8.920 0618 | 8.921 5756 | 43 |
| 18 | 8.913 9488 | 8.915 4810 | 8.917 0576 | 8.918 5715 | 8.920 0872 | 8.921 6010 | 42 |
| 19 | 8.913 9744 | 8.915 5065 | 8.917 0830 | 8.918 5968 | 8.920 1125 | 8.921 6263 | 41 |
| 20 | 8.913 9999 | 8.915 5320 | 8.917 1084 | 8.918 6222 | 8.920 1379 | 8.921 6517 | 40 |
| 21 | 8.914 0255 | 8.915 5575 | 8.917 1337 | 8.918 6475 | 8.920 1632 | 8.921 6770 | 39 |
| 22 | 8.914 0511 | 8.915 5830 | 8.917 1591 | 8.918 6729 | 8.920 1886 | 8.921 7024 | 38 |
| 23 | 8.914 0767 | 8.915 6085 | 8.917 1845 | 8.918 6982 | 8.920 2139 | 8.921 7277 | 37 |
| 24 | 8.914 1023 | 8.915 6340 | 8.917 2099 | 8.918 7236 | 8.920 2393 | 8.921 7531 | 36 |
| 25 | 8.914 1278 | 8.915 6594 | 8.917 2352 | 8.918 7489 | 8.920 2646 | 8.921 7784 | 35 |
| 26 | 8.914 1534 | 8.915 6849 | 8.917 2606 | 8.918 7743 | 8.920 2900 | 8.921 8038 | 34 |
| 27 | 8.914 1790 | 8.915 7104 | 8.917 2860 | 8.918 7996 | 8.920 3153 | 8.921 8291 | 33 |
| 28 | 8.914 2045 | 8.915 7359 | 8.917 3114 | 8.918 8250 | 8.920 3407 | 8.921 8545 | 32 |
| 29 | 8.914 2301 | 8.915 7613 | 8.917 3368 | 8.918 8503 | 8.920 3660 | 8.921 8798 | 31 |
| 30 | 8.914 2557 | 8.915 7868 | 8.917 3622 | 8.918 8757 | 8.920 3914 | 8.921 9052 | 30 |
| 31 | 8.914 2812 | 8.915 8123 | 8.917 3876 | 8.918 9010 | 8.920 4167 | 8.921 9305 | 29 |
| 32 | 8.914 3068 | 8.915 8378 | 8.917 4130 | 8.918 9264 | 8.920 4421 | 8.921 9559 | 28 |
| 33 | 8.914 3324 | 8.915 8633 | 8.917 4384 | 8.918 9517 | 8.920 4674 | 8.921 9812 | 27 |
| 34 | 8.914 3579 | 8.915 8887 | 8.917 4638 | 8.918 9771 | 8.920 4928 | 8.922 0066 | 26 |
| 35 | 8.914 3835 | 8.915 9142 | 8.917 4892 | 8.918 1024 | 8.920 5181 | 8.922 0319 | 25 |
| 36 | 8.914 4090 | 8.915 9396 | 8.917 5146 | 8.918 1278 | 8.920 5435 | 8.922 0573 | 24 |
| 37 | 8.914 4346 | 8.915 9651 | 8.917 5400 | 8.918 1531 | 8.920 5688 | 8.922 0826 | 23 |
| 38 | 8.914 4601 | 8.915 9905 | 8.917 5654 | 8.918 1785 | 8.920 5942 | 8.922 1080 | 22 |
| 39 | 8.914 4857 | 8.916 0160 | 8.917 5908 | 8.918 2038 | 8.920 6195 | 8.922 1333 | 21 |
| 40 | 8.914 5112 | 8.916 0415 | 8.917 6162 | 8.918 2292 | 8.920 6449 | 8.922 1587 | 20 |
| 41 | 8.914 5368 | 8.916 0669 | 8.917 6416 | 8.918 2545 | 8.920 6702 | 8.922 1840 | 19 |
| 42 | 8.914 5623 | 8.916 0924 | 8.917 6670 | 8.918 2799 | 8.920 6956 | 8.922 2094 | 18 |
| 43 | 8.914 5879 | 8.916 1178 | 8.917 6924 | 8.918 3052 | 8.920 7209 | 8.922 2347 | 17 |
| 44 | 8.914 6134 | 8.916 1433 | 8.917 7178 | 8.918 3306 | 8.920 7463 | 8.922 2601 | 16 |
| 45 | 8.914 6390 | 8.916 1688 | 8.917 7432 | 8.918 3559 | 8.920 7716 | 8.922 2854 | 15 |
| 46 | 8.914 6645 | 8.916 1942 | 8.917 7686 | 8.918 3813 | 8.920 7970 | 8.922 3108 | 14 |
| 47 | 8.914 6900 | 8.916 2196 | 8.917 7940 | 8.918 4066 | 8.920 8223 | 8.922 3361 | 13 |
| 48 | 8.914 7156 | 8.916 2451 | 8.917 8194 | 8.918 4320 | 8.920 8477 | 8.922 3615 | 12 |
| 49 | 8.914 7411 | 8.916 2705 | 8.917 8448 | 8.918 4573 | 8.920 8730 | 8.922 3868 | 11 |
| 50 | 8.914 7667 | 8.916 2960 | 8.917 8702 | 8.918 4827 | 8.920 8984 | 8.922 4122 | 10 |
| 51 | 8.914 7922 | 8.916 3214 | 8.917 8956 | 8.918 5080 | 8.920 9237 | 8.922 4375 | 9  |
| 52 | 8.914 8177 | 8.916 3469 | 8.917 9210 | 8.918 5334 | 8.920 9491 | 8.922 4629 | 8  |
| 53 | 8.914 8433 | 8.916 3723 | 8.917 9464 | 8.918 5587 | 8.920 9744 | 8.922 4882 | 7  |
| 54 | 8.914 8688 | 8.916 3978 | 8.917 9718 | 8.918 5841 | 8.920 9998 | 8.922 5136 | 6  |
| 55 | 8.914 8943 | 8.916 4232 | 8.917 9972 | 8.918 6094 | 8.921 0251 | 8.922 5389 | 5  |
| 56 | 8.914 9198 | 8.916 4486 | 8.918 0226 | 8.918 6348 | 8.921 0505 | 8.922 5643 | 4  |
| 57 | 8.914 9454 | 8.916 4741 | 8.918 0480 | 8.918 6601 | 8.921 0758 | 8.922 5896 | 3  |
| 58 | 8.914 9709 | 8.916 4995 | 8.918 0734 | 8.918 6855 | 8.921 1012 | 8.922 6150 | 2  |
| 59 | 8.914 9964 | 8.916 5249 | 8.918 0988 | 8.918 7108 | 8.921 1265 | 8.922 6403 | 1  |
| 60 | 8.915 0219 | 8.916 5504 | 8.918 1242 | 8.918 7362 | 8.921 1519 | 8.922 6657 | 0  |
| "  | 17'        | 16'        | 15'        | 14'        | 13'        | 12'        | "  |







| "  | 48'        | 49'        | 50'        | 51'        | 52'        | 53'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | R.922 6105 | R.923 1121 | R.924 6109 | R.925 1101 | R.926 6105 | R.927 1109 | 60 |
| 1  | R.922 6156 | R.923 1171 | R.924 6158 | R.925 1151 | R.926 6154 | R.927 1158 | 59 |
| 2  | R.922 6206 | R.923 1221 | R.924 6207 | R.925 1201 | R.926 6204 | R.927 1208 | 58 |
| 3  | R.922 6257 | R.923 1271 | R.924 6258 | R.925 1251 | R.926 6254 | R.927 1258 | 57 |
| 4  | R.922 7108 | R.923 2121 | R.924 7109 | R.925 2101 | R.926 7104 | R.927 2108 | 56 |
| 5  | R.922 7158 | R.923 2171 | R.924 7159 | R.925 2151 | R.926 7154 | R.927 2158 | 55 |
| 6  | R.922 7209 | R.923 2221 | R.924 7210 | R.925 2201 | R.926 7204 | R.927 2208 | 54 |
| 7  | R.922 7860 | R.923 2871 | R.924 7861 | R.925 2851 | R.926 7854 | R.927 2858 | 53 |
| 8  | R.922 8110 | R.923 3121 | R.924 8111 | R.925 3101 | R.926 8104 | R.927 3108 | 52 |
| 9  | R.922 8361 | R.923 3371 | R.924 8362 | R.925 3351 | R.926 8354 | R.927 3358 | 51 |
| 10 | R.922 8611 | R.923 3621 | R.924 8612 | R.925 3601 | R.926 8604 | R.927 3608 | 50 |
| 11 | R.922 8862 | R.923 3871 | R.924 8863 | R.925 3851 | R.926 8854 | R.927 3858 | 49 |
| 12 | R.922 9113 | R.923 4121 | R.924 9114 | R.925 4101 | R.926 9104 | R.927 4108 | 48 |
| 13 | R.922 9363 | R.923 4371 | R.924 9364 | R.925 4351 | R.926 9354 | R.927 4358 | 47 |
| 14 | R.922 9614 | R.923 4621 | R.924 9615 | R.925 4601 | R.926 9604 | R.927 4608 | 46 |
| 15 | R.922 9864 | R.923 4871 | R.924 9865 | R.925 4851 | R.926 9854 | R.927 4858 | 45 |
| 16 | R.923 0115 | R.923 5121 | R.924 0116 | R.925 5101 | R.926 0104 | R.927 5108 | 44 |
| 17 | R.923 0365 | R.924 5371 | R.925 0366 | R.926 5351 | R.927 0354 | R.928 5358 | 43 |
| 18 | R.923 0616 | R.924 5621 | R.925 0617 | R.926 5601 | R.927 0604 | R.928 5608 | 42 |
| 19 | R.923 0866 | R.924 5871 | R.925 0867 | R.926 5851 | R.927 0854 | R.928 5858 | 41 |
| 20 | R.923 1117 | R.924 6121 | R.925 1118 | R.926 6101 | R.927 1104 | R.928 6108 | 40 |
| 21 | R.923 1367 | R.924 6371 | R.925 1368 | R.926 6351 | R.927 1354 | R.928 6358 | 39 |
| 22 | R.923 1618 | R.924 6621 | R.925 1619 | R.926 6601 | R.927 1604 | R.928 6608 | 38 |
| 23 | R.923 1868 | R.924 6871 | R.925 1869 | R.926 6851 | R.927 1854 | R.928 6858 | 37 |
| 24 | R.923 2118 | R.924 7121 | R.925 2119 | R.926 7101 | R.927 2104 | R.928 7108 | 36 |
| 25 | R.923 2369 | R.924 7371 | R.925 2370 | R.926 7351 | R.927 2354 | R.928 7358 | 35 |
| 26 | R.923 2619 | R.924 7621 | R.925 2620 | R.926 7601 | R.927 2604 | R.928 7608 | 34 |
| 27 | R.923 2869 | R.924 7871 | R.925 2870 | R.926 7851 | R.927 2854 | R.928 7858 | 33 |
| 28 | R.923 3120 | R.924 8121 | R.925 3121 | R.926 8101 | R.927 3104 | R.928 8108 | 32 |
| 29 | R.923 3370 | R.924 8371 | R.925 3371 | R.926 8351 | R.927 3354 | R.928 8358 | 31 |
| 30 | R.923 3620 | R.924 8621 | R.925 3621 | R.926 8601 | R.927 3604 | R.928 8608 | 30 |
| 31 | R.923 3871 | R.924 8871 | R.925 3872 | R.926 8851 | R.927 3854 | R.928 8858 | 29 |
| 32 | R.923 4121 | R.924 9121 | R.925 4122 | R.926 9101 | R.927 4104 | R.928 9108 | 28 |
| 33 | R.923 4371 | R.924 9371 | R.925 4372 | R.926 9351 | R.927 4354 | R.928 9358 | 27 |
| 34 | R.923 4622 | R.924 9621 | R.925 4623 | R.926 9601 | R.927 4604 | R.928 9608 | 26 |
| 35 | R.923 4872 | R.924 9871 | R.925 4873 | R.926 9851 | R.927 4854 | R.928 9858 | 25 |
| 36 | R.923 5122 | R.925 0121 | R.926 5123 | R.927 0101 | R.928 5104 | R.929 0108 | 24 |
| 37 | R.923 5372 | R.925 0371 | R.926 5373 | R.927 0351 | R.928 5354 | R.929 0358 | 23 |
| 38 | R.923 5622 | R.925 0621 | R.926 5623 | R.927 0601 | R.928 5604 | R.929 0608 | 22 |
| 39 | R.923 5872 | R.925 0871 | R.926 5873 | R.927 0851 | R.928 5854 | R.929 0858 | 21 |
| 40 | R.923 6122 | R.925 1121 | R.926 6123 | R.927 1101 | R.928 6104 | R.929 1108 | 20 |
| 41 | R.923 6372 | R.925 1371 | R.926 6373 | R.927 1351 | R.928 6354 | R.929 1358 | 19 |
| 42 | R.923 6622 | R.925 1621 | R.926 6623 | R.927 1601 | R.928 6604 | R.929 1608 | 18 |
| 43 | R.923 6872 | R.925 1871 | R.926 6873 | R.927 1851 | R.928 6854 | R.929 1858 | 17 |
| 44 | R.923 7122 | R.925 2121 | R.926 7123 | R.927 2101 | R.928 7104 | R.929 2108 | 16 |
| 45 | R.923 7372 | R.925 2371 | R.926 7373 | R.927 2351 | R.928 7354 | R.929 2358 | 15 |
| 46 | R.923 7622 | R.925 2621 | R.926 7623 | R.927 2601 | R.928 7604 | R.929 2608 | 14 |
| 47 | R.923 7872 | R.925 2871 | R.926 7873 | R.927 2851 | R.928 7854 | R.929 2858 | 13 |
| 48 | R.923 8122 | R.925 3121 | R.926 8123 | R.927 3101 | R.928 8104 | R.929 3108 | 12 |
| 49 | R.923 8372 | R.925 3371 | R.926 8373 | R.927 3351 | R.928 8354 | R.929 3358 | 11 |
| 50 | R.923 8622 | R.925 3621 | R.926 8623 | R.927 3601 | R.928 8604 | R.929 3608 | 10 |
| 51 | R.923 8872 | R.925 3871 | R.926 8873 | R.927 3851 | R.928 8854 | R.929 3858 | 9  |
| 52 | R.923 9122 | R.925 4121 | R.926 9123 | R.927 4101 | R.928 9104 | R.929 4108 | 8  |
| 53 | R.923 9372 | R.925 4371 | R.926 9373 | R.927 4351 | R.928 9354 | R.929 4358 | 7  |
| 54 | R.923 9622 | R.925 4621 | R.926 9623 | R.927 4601 | R.928 9604 | R.929 4608 | 6  |
| 55 | R.923 9872 | R.925 4871 | R.926 9873 | R.927 4851 | R.928 9854 | R.929 4858 | 5  |
| 56 | R.924 0122 | R.925 5121 | R.927 0123 | R.928 5101 | R.929 0104 | R.930 0108 | 4  |
| 57 | R.924 0372 | R.925 5371 | R.927 0373 | R.928 5351 | R.929 0354 | R.930 0358 | 3  |
| 58 | R.924 0622 | R.925 5621 | R.927 0623 | R.928 5601 | R.929 0604 | R.930 0608 | 2  |
| 59 | R.924 0872 | R.925 5871 | R.927 0873 | R.928 5851 | R.929 0854 | R.930 0858 | 1  |
| 60 | R.924 1122 | R.925 6121 | R.927 1123 | R.928 6101 | R.929 1104 | R.930 1108 | 0  |
| "  | 11'        | 10'        | 9'         | 8'         | 7'         | 6'         | "  |

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| "  | 48'        | 49'        | 50'        | 51'        | 52'        | 53'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.924 1363 | 8.925 6487 | 8.927 1560 | 8.928 6581 | 8.930 1552 | 8.931 6471 | 60 |
| 1  | 8.924 1615 | 8.925 6739 | 8.927 1811 | 8.928 6831 | 8.930 1801 | 8.931 6719 | 59 |
| 2  | 8.924 1868 | 8.925 6991 | 8.927 2062 | 8.928 7081 | 8.930 2050 | 8.931 6968 | 58 |
| 3  | 8.924 2120 | 8.925 7242 | 8.927 2312 | 8.928 7331 | 8.930 2299 | 8.931 7216 | 57 |
| 4  | 8.924 2373 | 8.925 7494 | 8.927 2563 | 8.928 7581 | 8.930 2548 | 8.931 7464 | 56 |
| 5  | 8.924 2625 | 8.925 7745 | 8.927 2814 | 8.928 7831 | 8.930 2797 | 8.931 7712 | 55 |
| 6  | 8.924 2878 | 8.925 7997 | 8.927 3064 | 8.928 8081 | 8.930 3046 | 8.931 7960 | 54 |
| 7  | 8.924 3130 | 8.925 8248 | 8.927 3315 | 8.928 8331 | 8.930 3295 | 8.931 8209 | 53 |
| 8  | 8.924 3382 | 8.925 8500 | 8.927 3566 | 8.928 8580 | 8.930 3544 | 8.931 8457 | 52 |
| 9  | 8.924 3635 | 8.925 8752 | 8.927 3817 | 8.928 8830 | 8.930 3793 | 8.931 8705 | 51 |
| 10 | 8.924 3887 | 8.925 9003 | 8.927 4067 | 8.928 9080 | 8.930 4042 | 8.931 8953 | 50 |
| 11 | 8.924 4140 | 8.925 9255 | 8.927 4318 | 8.928 9330 | 8.930 4291 | 8.931 9201 | 49 |
| 12 | 8.924 4392 | 8.925 9506 | 8.927 4568 | 8.928 9579 | 8.930 4540 | 8.931 9449 | 48 |
| 13 | 8.924 4644 | 8.925 9757 | 8.927 4819 | 8.928 9829 | 8.930 4789 | 8.931 9697 | 47 |
| 14 | 8.924 4897 | 8.926 0009 | 8.927 5070 | 8.929 0079 | 8.930 5037 | 8.931 9945 | 46 |
| 15 | 8.924 5149 | 8.926 0260 | 8.927 5320 | 8.929 0329 | 8.930 5286 | 8.932 0193 | 45 |
| 16 | 8.924 5401 | 8.926 0512 | 8.927 5571 | 8.929 0578 | 8.930 5535 | 8.932 0441 | 44 |
| 17 | 8.924 5653 | 8.926 0763 | 8.927 5821 | 8.929 0828 | 8.930 5784 | 8.932 0689 | 43 |
| 18 | 8.924 5906 | 8.926 1015 | 8.927 6072 | 8.929 1078 | 8.930 6033 | 8.932 0937 | 42 |
| 19 | 8.924 6158 | 8.926 1266 | 8.927 6322 | 8.929 1327 | 8.930 6282 | 8.932 1185 | 41 |
| 20 | 8.924 6410 | 8.926 1517 | 8.927 6573 | 8.929 1577 | 8.930 6530 | 8.932 1433 | 40 |
| 21 | 8.924 6662 | 8.926 1769 | 8.927 6823 | 8.929 1827 | 8.930 6779 | 8.932 1681 | 39 |
| 22 | 8.924 6915 | 8.926 2020 | 8.927 7074 | 8.929 2076 | 8.930 7028 | 8.932 1929 | 38 |
| 23 | 8.924 7167 | 8.926 2271 | 8.927 7324 | 8.929 2326 | 8.930 7277 | 8.932 2177 | 37 |
| 24 | 8.924 7419 | 8.926 2523 | 8.927 7575 | 8.929 2576 | 8.930 7526 | 8.932 2425 | 36 |
| 25 | 8.924 7671 | 8.926 2774 | 8.927 7825 | 8.929 2825 | 8.930 7774 | 8.932 2673 | 35 |
| 26 | 8.924 7923 | 8.926 3025 | 8.927 8076 | 8.929 3075 | 8.930 8023 | 8.932 2921 | 34 |
| 27 | 8.924 8175 | 8.926 3276 | 8.927 8326 | 8.929 3324 | 8.930 8272 | 8.932 3169 | 33 |
| 28 | 8.924 8427 | 8.926 3528 | 8.927 8576 | 8.929 3574 | 8.930 8520 | 8.932 3416 | 32 |
| 29 | 8.924 8680 | 8.926 3779 | 8.927 8827 | 8.929 3823 | 8.930 8769 | 8.932 3664 | 31 |
| 30 | 8.924 8932 | 8.926 4030 | 8.927 9077 | 8.929 4073 | 8.930 9018 | 8.932 3912 | 30 |
| 31 | 8.924 9184 | 8.926 4281 | 8.927 9327 | 8.929 4322 | 8.930 9266 | 8.932 4160 | 29 |
| 32 | 8.924 9436 | 8.926 4533 | 8.927 9578 | 8.929 4572 | 8.930 9515 | 8.932 4408 | 28 |
| 33 | 8.924 9688 | 8.926 4784 | 8.927 9828 | 8.929 4821 | 8.930 9764 | 8.932 4656 | 27 |
| 34 | 8.924 9940 | 8.926 5035 | 8.928 0078 | 8.929 5071 | 8.931 0012 | 8.932 4903 | 26 |
| 35 | 8.925 0192 | 8.926 5286 | 8.928 0329 | 8.929 5320 | 8.931 0261 | 8.932 5151 | 25 |
| 36 | 8.925 0444 | 8.926 5537 | 8.928 0579 | 8.929 5570 | 8.931 0509 | 8.932 5399 | 24 |
| 37 | 8.925 0696 | 8.926 5788 | 8.928 0829 | 8.929 5819 | 8.931 0758 | 8.932 5647 | 23 |
| 38 | 8.925 0948 | 8.926 6039 | 8.928 1079 | 8.929 6068 | 8.931 1007 | 8.932 5894 | 22 |
| 39 | 8.925 1200 | 8.926 6290 | 8.928 1330 | 8.929 6318 | 8.931 1255 | 8.932 6142 | 21 |
| 40 | 8.925 1452 | 8.926 6542 | 8.928 1580 | 8.929 6567 | 8.931 1504 | 8.932 6390 | 20 |
| 41 | 8.925 1704 | 8.926 6793 | 8.928 1830 | 8.929 6817 | 8.931 1752 | 8.932 6637 | 19 |
| 42 | 8.925 1955 | 8.926 7044 | 8.928 2080 | 8.929 7066 | 8.931 2001 | 8.932 6885 | 18 |
| 43 | 8.925 2207 | 8.926 7295 | 8.928 2331 | 8.929 7315 | 8.931 2249 | 8.932 7133 | 17 |
| 44 | 8.925 2459 | 8.926 7546 | 8.928 2581 | 8.929 7565 | 8.931 2498 | 8.932 7380 | 16 |
| 45 | 8.925 2711 | 8.926 7797 | 8.928 2831 | 8.929 7814 | 8.931 2746 | 8.932 7628 | 15 |
| 46 | 8.925 2963 | 8.926 8048 | 8.928 3081 | 8.929 8063 | 8.931 2995 | 8.932 7875 | 14 |
| 47 | 8.925 3215 | 8.926 8299 | 8.928 3331 | 8.929 8312 | 8.931 3243 | 8.932 8123 | 13 |
| 48 | 8.925 3467 | 8.926 8550 | 8.928 3581 | 8.929 8562 | 8.931 3491 | 8.932 8371 | 12 |
| 49 | 8.925 3718 | 8.926 8801 | 8.928 3831 | 8.929 8811 | 8.931 3740 | 8.932 8618 | 11 |
| 50 | 8.925 3970 | 8.926 9052 | 8.928 4081 | 8.929 9060 | 8.931 3988 | 8.932 8866 | 10 |
| 51 | 8.925 4222 | 8.926 9302 | 8.928 4331 | 8.929 9309 | 8.931 4237 | 8.932 9113 | 9  |
| 52 | 8.925 4474 | 8.926 9553 | 8.928 4581 | 8.929 9559 | 8.931 4485 | 8.932 9361 | 8  |
| 53 | 8.925 4725 | 8.926 9804 | 8.928 4832 | 8.929 9808 | 8.931 4733 | 8.932 9608 | 7  |
| 54 | 8.925 4977 | 8.927 0055 | 8.928 5082 | 8.930 0057 | 8.931 4982 | 8.932 9856 | 6  |
| 55 | 8.925 5229 | 8.927 0306 | 8.928 5332 | 8.930 0306 | 8.931 5230 | 8.933 0103 | 5  |
| 56 | 8.925 5481 | 8.927 0557 | 8.928 5582 | 8.930 0555 | 8.931 5478 | 8.933 0351 | 4  |
| 57 | 8.925 5732 | 8.927 0808 | 8.928 5832 | 8.930 0804 | 8.931 5726 | 8.933 0598 | 3  |
| 58 | 8.925 5984 | 8.927 1058 | 8.928 6081 | 8.930 1053 | 8.931 5975 | 8.933 0846 | 2  |
| 59 | 8.925 6236 | 8.927 1309 | 8.928 6331 | 8.930 1303 | 8.931 6223 | 8.933 1093 | 1  |
| 60 | 8.925 6487 | 8.927 1560 | 8.928 6581 | 8.930 1552 | 8.931 6471 | 8.933 1340 | 0  |
| "  | 11'        | 10'        | 9'         | 8'         | 7'         | 6'         | "  |

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| "  | 54'        | 56'        | 58'        | 60'        | 62'        | 64'        | 66'        | "  |
|----|------------|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.931 5439 | 8.931 0150 | 8.931 4861 | 8.931 9572 | 8.931 4283 | 8.931 8994 | 8.931 3705 | 60 |
| 1  | 8.931 5685 | 8.931 0395 | 8.931 5106 | 8.931 9818 | 8.931 4529 | 8.931 9240 | 8.931 3946 | 59 |
| 2  | 8.931 5930 | 8.931 0640 | 8.931 5351 | 8.932 0063 | 8.931 4774 | 8.931 9485 | 8.931 4191 | 58 |
| 3  | 8.931 6176 | 8.931 0884 | 8.931 5594 | 8.932 0306 | 8.931 5018 | 8.931 9729 | 8.931 4436 | 57 |
| 4  | 8.931 6422 | 8.931 1129 | 8.931 5836 | 8.932 0549 | 8.931 5261 | 8.932 0074 | 8.931 4681 | 56 |
| 5  | 8.931 6667 | 8.931 1374 | 8.931 6079 | 8.932 0792 | 8.931 5504 | 8.932 0319 | 8.931 4926 | 55 |
| 6  | 8.931 6913 | 8.931 1618 | 8.931 6322 | 8.932 1035 | 8.931 5747 | 8.932 0564 | 8.931 5171 | 54 |
| 7  | 8.931 7158 | 8.931 1861 | 8.931 6565 | 8.932 1278 | 8.931 5990 | 8.932 0809 | 8.931 5416 | 53 |
| 8  | 8.931 7404 | 8.931 2108 | 8.931 6808 | 8.932 1521 | 8.932 0233 | 8.932 1054 | 8.931 5661 | 52 |
| 9  | 8.931 7649 | 8.931 2354 | 8.931 7051 | 8.932 1764 | 8.932 0476 | 8.932 1299 | 8.931 5906 | 51 |
| 10 | 8.931 7895 | 8.931 2597 | 8.931 7294 | 8.932 2007 | 8.932 0719 | 8.932 1544 | 8.931 6151 | 50 |
| 11 | 8.931 8140 | 8.931 2842 | 8.931 7537 | 8.932 2250 | 8.932 0962 | 8.932 1789 | 8.931 6396 | 49 |
| 12 | 8.931 8385 | 8.931 3086 | 8.931 7780 | 8.932 2493 | 8.932 1205 | 8.932 2034 | 8.931 6641 | 48 |
| 13 | 8.931 8631 | 8.931 3331 | 8.931 8023 | 8.932 2736 | 8.932 1448 | 8.932 2279 | 8.931 6886 | 47 |
| 14 | 8.931 8876 | 8.931 3575 | 8.931 8266 | 8.932 2979 | 8.932 1691 | 8.932 2524 | 8.931 7131 | 46 |
| 15 | 8.931 9122 | 8.931 3820 | 8.931 8509 | 8.932 3222 | 8.932 1934 | 8.932 2769 | 8.931 7376 | 45 |
| 16 | 8.931 9367 | 8.931 4064 | 8.931 8752 | 8.932 3465 | 8.932 2177 | 8.932 3014 | 8.931 7621 | 44 |
| 17 | 8.931 9612 | 8.931 4309 | 8.931 8995 | 8.932 3708 | 8.932 2420 | 8.932 3259 | 8.931 7866 | 43 |
| 18 | 8.931 9858 | 8.931 4554 | 8.931 9238 | 8.932 3951 | 8.932 2663 | 8.932 3504 | 8.931 8111 | 42 |
| 19 | 8.932 0103 | 8.931 4798 | 8.931 9481 | 8.932 4194 | 8.932 2906 | 8.932 3749 | 8.931 8356 | 41 |
| 20 | 8.932 0348 | 8.931 5043 | 8.931 9724 | 8.932 4437 | 8.932 3149 | 8.932 3994 | 8.931 8601 | 40 |
| 21 | 8.932 0594 | 8.931 5287 | 8.931 9967 | 8.932 4680 | 8.932 3392 | 8.932 4239 | 8.931 8846 | 39 |
| 22 | 8.932 0839 | 8.931 5531 | 8.932 0210 | 8.932 4923 | 8.932 3635 | 8.932 4484 | 8.931 9091 | 38 |
| 23 | 8.932 1084 | 8.931 5776 | 8.932 0453 | 8.932 5166 | 8.932 3878 | 8.932 4729 | 8.931 9336 | 37 |
| 24 | 8.932 1330 | 8.931 6020 | 8.932 0696 | 8.932 5409 | 8.932 4121 | 8.932 4974 | 8.931 9581 | 36 |
| 25 | 8.932 1575 | 8.931 6265 | 8.932 0940 | 8.932 5652 | 8.932 4364 | 8.932 5219 | 8.931 9826 | 35 |
| 26 | 8.932 1820 | 8.931 6509 | 8.932 1183 | 8.932 5895 | 8.932 4607 | 8.932 5464 | 8.932 0071 | 34 |
| 27 | 8.932 2065 | 8.931 6753 | 8.932 1426 | 8.932 6138 | 8.932 4850 | 8.932 5709 | 8.932 0316 | 33 |
| 28 | 8.932 2311 | 8.931 6998 | 8.932 1669 | 8.932 6381 | 8.932 5093 | 8.932 5954 | 8.932 0561 | 32 |
| 29 | 8.932 2556 | 8.931 7242 | 8.932 1912 | 8.932 6624 | 8.932 5336 | 8.932 6199 | 8.932 0806 | 31 |
| 30 | 8.932 2801 | 8.931 7487 | 8.932 2155 | 8.932 6867 | 8.932 5579 | 8.932 6444 | 8.932 1051 | 30 |
| 31 | 8.932 3046 | 8.931 7731 | 8.932 2398 | 8.932 7110 | 8.932 5822 | 8.932 6689 | 8.932 1296 | 29 |
| 32 | 8.932 3291 | 8.931 7975 | 8.932 2641 | 8.932 7353 | 8.932 6065 | 8.932 6934 | 8.932 1541 | 28 |
| 33 | 8.932 3536 | 8.931 8220 | 8.932 2884 | 8.932 7596 | 8.932 6308 | 8.932 7179 | 8.932 1786 | 27 |
| 34 | 8.932 3781 | 8.931 8464 | 8.932 3127 | 8.932 7839 | 8.932 6551 | 8.932 7424 | 8.932 2031 | 26 |
| 35 | 8.932 4027 | 8.931 8708 | 8.932 3370 | 8.932 8082 | 8.932 6794 | 8.932 7669 | 8.932 2276 | 25 |
| 36 | 8.932 4272 | 8.931 8952 | 8.932 3613 | 8.932 8325 | 8.932 7037 | 8.932 7914 | 8.932 2521 | 24 |
| 37 | 8.932 4517 | 8.931 9197 | 8.932 3856 | 8.932 8568 | 8.932 7280 | 8.932 8159 | 8.932 2766 | 23 |
| 38 | 8.932 4762 | 8.931 9441 | 8.932 4099 | 8.932 8811 | 8.932 7523 | 8.932 8404 | 8.932 3011 | 22 |
| 39 | 8.932 5007 | 8.931 9685 | 8.932 4342 | 8.932 9054 | 8.932 7766 | 8.932 8649 | 8.932 3256 | 21 |
| 40 | 8.932 5252 | 8.931 9929 | 8.932 4585 | 8.932 9297 | 8.932 8009 | 8.932 8894 | 8.932 3501 | 20 |
| 41 | 8.932 5497 | 8.932 0174 | 8.932 4828 | 8.932 9540 | 8.932 8252 | 8.932 9139 | 8.932 3746 | 19 |
| 42 | 8.932 5742 | 8.932 0418 | 8.932 5071 | 8.932 9783 | 8.932 8495 | 8.932 9384 | 8.932 3991 | 18 |
| 43 | 8.932 5987 | 8.932 0662 | 8.932 5314 | 8.933 0026 | 8.932 8738 | 8.932 9629 | 8.932 4236 | 17 |
| 44 | 8.932 6232 | 8.932 0906 | 8.932 5557 | 8.933 0269 | 8.932 8981 | 8.932 9874 | 8.932 4481 | 16 |
| 45 | 8.932 6477 | 8.932 1150 | 8.932 5800 | 8.933 0512 | 8.932 9224 | 8.933 0119 | 8.932 4726 | 15 |
| 46 | 8.932 6722 | 8.932 1394 | 8.932 6043 | 8.933 0755 | 8.932 9467 | 8.933 0364 | 8.932 4971 | 14 |
| 47 | 8.932 6967 | 8.932 1638 | 8.932 6286 | 8.933 0998 | 8.932 9710 | 8.933 0609 | 8.932 5216 | 13 |
| 48 | 8.932 7212 | 8.932 1883 | 8.932 6529 | 8.933 1241 | 8.932 9953 | 8.933 0854 | 8.932 5461 | 12 |
| 49 | 8.932 7457 | 8.932 2127 | 8.932 6772 | 8.933 1484 | 8.933 0196 | 8.933 1099 | 8.932 5706 | 11 |
| 50 | 8.932 7702 | 8.932 2371 | 8.932 7015 | 8.933 1727 | 8.933 0439 | 8.933 1344 | 8.932 5951 | 10 |
| 51 | 8.932 7947 | 8.932 2615 | 8.932 7258 | 8.933 1970 | 8.933 0682 | 8.933 1589 | 8.932 6196 | 9  |
| 52 | 8.932 8191 | 8.932 2859 | 8.932 7501 | 8.933 2213 | 8.933 0925 | 8.933 1834 | 8.932 6441 | 8  |
| 53 | 8.932 8436 | 8.932 3103 | 8.932 7744 | 8.933 2456 | 8.933 1168 | 8.933 2079 | 8.932 6686 | 7  |
| 54 | 8.932 8681 | 8.932 3347 | 8.932 7987 | 8.933 2699 | 8.933 1411 | 8.933 2324 | 8.932 6931 | 6  |
| 55 | 8.932 8926 | 8.932 3591 | 8.932 8230 | 8.933 2942 | 8.933 1654 | 8.933 2569 | 8.932 7176 | 5  |
| 56 | 8.932 9171 | 8.932 3835 | 8.932 8473 | 8.933 3185 | 8.933 1897 | 8.933 2814 | 8.932 7421 | 4  |
| 57 | 8.932 9416 | 8.932 4079 | 8.932 8716 | 8.933 3428 | 8.933 2140 | 8.933 3059 | 8.932 7666 | 3  |
| 58 | 8.932 9660 | 8.932 4323 | 8.932 8959 | 8.933 3671 | 8.933 2383 | 8.933 3304 | 8.932 7911 | 2  |
| 59 | 8.932 9905 | 8.932 4567 | 8.932 9202 | 8.933 3914 | 8.933 2626 | 8.933 3549 | 8.932 8156 | 1  |
| 60 | 8.933 0150 | 8.932 4811 | 8.932 9445 | 8.933 4157 | 8.933 2869 | 8.933 3794 | 8.932 8401 | 0  |
| "  | 6'         | 4'         | 3'         | 2'         | 1'         | 0'         | "          |    |



| "  | 54'        | 55'        | 56'        | 57'        | 58'        | 59'        | "  |
|----|------------|------------|------------|------------|------------|------------|----|
| 0  | 8.933 1340 | 8.934 6160 | 8.936 0929 | 8.937 5650 | 8.939 0321 | 8.940 4944 | 60 |
| 1  | 8.933 1588 | 8.934 6406 | 8.936 1175 | 8.937 5895 | 8.939 0565 | 8.940 5187 | 59 |
| 2  | 8.933 1835 | 8.934 6653 | 8.936 1421 | 8.937 6139 | 8.939 0809 | 8.940 5430 | 58 |
| 3  | 8.933 2083 | 8.934 6899 | 8.936 1667 | 8.937 6384 | 8.939 1053 | 8.940 5673 | 57 |
| 4  | 8.933 2330 | 8.934 7146 | 8.936 1912 | 8.937 6629 | 8.939 1297 | 8.940 5917 | 56 |
| 5  | 8.933 2577 | 8.934 7392 | 8.936 2158 | 8.937 6874 | 8.939 1541 | 8.940 6160 | 55 |
| 6  | 8.933 2825 | 8.934 7639 | 8.936 2404 | 8.937 7119 | 8.939 1785 | 8.940 6403 | 54 |
| 7  | 8.933 3072 | 8.934 7885 | 8.936 2649 | 8.937 7364 | 8.939 2029 | 8.940 6646 | 53 |
| 8  | 8.933 3319 | 8.934 8132 | 8.936 2895 | 8.937 7609 | 8.939 2273 | 8.940 6890 | 52 |
| 9  | 8.933 3567 | 8.934 8378 | 8.936 3141 | 8.937 7853 | 8.939 2517 | 8.940 7133 | 51 |
| 10 | 8.933 3814 | 8.934 8625 | 8.936 3386 | 8.937 8098 | 8.939 2761 | 8.940 7376 | 50 |
| 11 | 8.933 4061 | 8.934 8871 | 8.936 3632 | 8.937 8343 | 8.939 3005 | 8.940 7619 | 49 |
| 12 | 8.933 4308 | 8.934 9118 | 8.936 3877 | 8.937 8588 | 8.939 3249 | 8.940 7862 | 48 |
| 13 | 8.933 4556 | 8.934 9364 | 8.936 4123 | 8.937 8833 | 8.939 3493 | 8.940 8105 | 47 |
| 14 | 8.933 4803 | 8.934 9610 | 8.936 4368 | 8.937 9077 | 8.939 3737 | 8.940 8349 | 46 |
| 15 | 8.933 5050 | 8.934 9857 | 8.936 4614 | 8.937 9322 | 8.939 3981 | 8.940 8592 | 45 |
| 16 | 8.933 5297 | 8.935 0103 | 8.936 4860 | 8.937 9567 | 8.939 4225 | 8.940 8835 | 44 |
| 17 | 8.933 5544 | 8.935 0349 | 8.936 5105 | 8.937 9811 | 8.939 4469 | 8.940 9078 | 43 |
| 18 | 8.933 5791 | 8.935 0596 | 8.936 5351 | 8.938 0056 | 8.939 4713 | 8.940 9321 | 42 |
| 19 | 8.933 6039 | 8.935 0842 | 8.936 5596 | 8.938 0301 | 8.939 4957 | 8.940 9564 | 41 |
| 20 | 8.933 6286 | 8.935 1088 | 8.936 5842 | 8.938 0545 | 8.939 5200 | 8.940 9807 | 40 |
| 21 | 8.933 6533 | 8.935 1335 | 8.936 6087 | 8.938 0790 | 8.939 5444 | 8.941 0050 | 39 |
| 22 | 8.933 6780 | 8.935 1581 | 8.936 6332 | 8.938 1035 | 8.939 5688 | 8.941 0293 | 38 |
| 23 | 8.933 7027 | 8.935 1827 | 8.936 6578 | 8.938 1279 | 8.939 5932 | 8.941 0536 | 37 |
| 24 | 8.933 7274 | 8.935 2074 | 8.936 6823 | 8.938 1524 | 8.939 6176 | 8.941 0779 | 36 |
| 25 | 8.933 7521 | 8.935 2320 | 8.936 7069 | 8.938 1769 | 8.939 6420 | 8.941 1022 | 35 |
| 26 | 8.933 7768 | 8.935 2566 | 8.936 7314 | 8.938 2013 | 8.939 6663 | 8.941 1265 | 34 |
| 27 | 8.933 8015 | 8.935 2812 | 8.936 7560 | 8.938 2258 | 8.939 6907 | 8.941 1508 | 33 |
| 28 | 8.933 8262 | 8.935 3058 | 8.936 7805 | 8.938 2502 | 8.939 7151 | 8.941 1751 | 32 |
| 29 | 8.933 8509 | 8.935 3305 | 8.936 8050 | 8.938 2747 | 8.939 7395 | 8.941 1994 | 31 |
| 30 | 8.933 8756 | 8.935 3551 | 8.936 8296 | 8.938 2991 | 8.939 7638 | 8.941 2237 | 30 |
| 31 | 8.933 9003 | 8.935 3797 | 8.936 8541 | 8.938 3236 | 8.939 7882 | 8.941 2480 | 29 |
| 32 | 8.933 9250 | 8.935 4043 | 8.936 8786 | 8.938 3480 | 8.939 8126 | 8.941 2722 | 28 |
| 33 | 8.933 9497 | 8.935 4289 | 8.936 9032 | 8.938 3725 | 8.939 8369 | 8.941 2965 | 27 |
| 34 | 8.933 9744 | 8.935 4535 | 8.936 9277 | 8.938 3969 | 8.939 8613 | 8.941 3208 | 26 |
| 35 | 8.933 9991 | 8.935 4781 | 8.936 9522 | 8.938 4214 | 8.939 8857 | 8.941 3451 | 25 |
| 36 | 8.934 0238 | 8.935 5027 | 8.936 9767 | 8.938 4458 | 8.939 9100 | 8.941 3694 | 24 |
| 37 | 8.934 0485 | 8.935 5274 | 8.937 0013 | 8.938 4703 | 8.939 9344 | 8.941 3937 | 23 |
| 38 | 8.934 0732 | 8.935 5520 | 8.937 0258 | 8.938 4947 | 8.939 9588 | 8.941 4180 | 22 |
| 39 | 8.934 0979 | 8.935 5766 | 8.937 0503 | 8.938 5191 | 8.939 9831 | 8.941 4422 | 21 |
| 40 | 8.934 1226 | 8.935 6012 | 8.937 0748 | 8.938 5436 | 8.940 0075 | 8.941 4665 | 20 |
| 41 | 8.934 1472 | 8.935 6258 | 8.937 0994 | 8.938 5680 | 8.940 0318 | 8.941 4908 | 19 |
| 42 | 8.934 1719 | 8.935 6504 | 8.937 1239 | 8.938 5925 | 8.940 0562 | 8.941 5151 | 18 |
| 43 | 8.934 1966 | 8.935 6750 | 8.937 1484 | 8.938 6169 | 8.940 0805 | 8.941 5393 | 17 |
| 44 | 8.934 2213 | 8.935 6996 | 8.937 1729 | 8.938 6413 | 8.940 1049 | 8.941 5636 | 16 |
| 45 | 8.934 2460 | 8.935 7242 | 8.937 1974 | 8.938 6658 | 8.940 1292 | 8.941 5879 | 15 |
| 46 | 8.934 2706 | 8.935 7488 | 8.937 2219 | 8.938 6902 | 8.940 1536 | 8.941 6121 | 14 |
| 47 | 8.934 2953 | 8.935 7733 | 8.937 2464 | 8.938 7146 | 8.940 1779 | 8.941 6364 | 13 |
| 48 | 8.934 3200 | 8.935 7979 | 8.937 2709 | 8.938 7391 | 8.940 2023 | 8.941 6607 | 12 |
| 49 | 8.934 3447 | 8.935 8225 | 8.937 2955 | 8.938 7635 | 8.940 2266 | 8.941 6849 | 11 |
| 50 | 8.934 3693 | 8.935 8471 | 8.937 3200 | 8.938 7879 | 8.940 2510 | 8.941 7092 | 10 |
| 51 | 8.934 3940 | 8.935 8717 | 8.937 3445 | 8.938 8123 | 8.940 2753 | 8.941 7335 | 9  |
| 52 | 8.934 4187 | 8.935 8963 | 8.937 3690 | 8.938 8368 | 8.940 2997 | 8.941 7577 | 8  |
| 53 | 8.934 4433 | 8.935 9209 | 8.937 3935 | 8.938 8612 | 8.940 3240 | 8.941 7820 | 7  |
| 54 | 8.934 4680 | 8.935 9455 | 8.937 4180 | 8.938 8856 | 8.940 3483 | 8.941 8063 | 6  |
| 55 | 8.934 4927 | 8.935 9700 | 8.937 4425 | 8.938 9100 | 8.940 3727 | 8.941 8305 | 5  |
| 56 | 8.934 5173 | 8.935 9946 | 8.937 4670 | 8.938 9344 | 8.940 3970 | 8.941 8548 | 4  |
| 57 | 8.934 5420 | 8.936 0192 | 8.937 4915 | 8.938 9588 | 8.940 4214 | 8.941 8790 | 3  |
| 58 | 8.934 5667 | 8.936 0438 | 8.937 5160 | 8.938 9833 | 8.940 4457 | 8.941 9033 | 2  |
| 59 | 8.934 5913 | 8.936 0684 | 8.937 5405 | 8.939 0077 | 8.940 4700 | 8.941 9275 | 1  |
| 60 | 8.934 6160 | 8.936 0929 | 8.937 5650 | 8.939 0321 | 8.940 4944 | 8.941 9518 | 0  |
| "  | 6'         | 4'         | 3'         | 2'         | 1'         | 0'         | "  |



| DEGREES. |            |     |            |      |            | MINUTES. |            | SECONDS. |            |
|----------|------------|-----|------------|------|------------|----------|------------|----------|------------|
| 0°       | 0.000 0000 | 60° | 1.047 1976 | 120° | 2.094 3951 | 0'       | 0.000 0000 | 0"       | 0.000 0000 |
| 1        | 0.017 4533 | 61  | 1.064 6508 | 121  | 2.111 8484 | 1        | 0.000 2909 | 1        | 0.000 0048 |
| 2        | 0.034 9066 | 62  | 1.082 1041 | 122  | 2.129 3017 | 2        | 0.000 5818 | 2        | 0.000 0097 |
| 3        | 0.052 3599 | 63  | 1.099 5574 | 123  | 2.146 7550 | 3        | 0.000 8727 | 3        | 0.000 0145 |
| 4        | 0.069 8132 | 64  | 1.117 0107 | 124  | 2.164 2083 | 4        | 0.001 1636 | 4        | 0.000 0194 |
| 5        | 0.087 2665 | 65  | 1.134 4640 | 125  | 2.181 6616 | 5        | 0.001 4544 | 5        | 0.000 0242 |
| 6        | 0.104 7198 | 66  | 1.151 9173 | 126  | 2.199 1149 | 6        | 0.001 7453 | 6        | 0.000 0291 |
| 7        | 0.122 1730 | 67  | 1.169 3706 | 127  | 2.216 5682 | 7        | 0.002 0362 | 7        | 0.000 0339 |
| 8        | 0.139 6263 | 68  | 1.186 8239 | 128  | 2.234 0214 | 8        | 0.002 3271 | 8        | 0.000 0388 |
| 9        | 0.157 0796 | 69  | 1.204 2772 | 129  | 2.251 4747 | 9        | 0.002 6180 | 9        | 0.000 0436 |
| 10       | 0.174 5329 | 70  | 1.221 7305 | 130  | 2.268 9280 | 10       | 0.002 9089 | 10       | 0.000 0485 |
| 11       | 0.191 9862 | 71  | 1.239 1838 | 131  | 2.286 3813 | 11       | 0.003 1998 | 11       | 0.000 0533 |
| 12       | 0.209 4395 | 72  | 1.256 6371 | 132  | 2.303 8346 | 12       | 0.003 4907 | 12       | 0.000 0582 |
| 13       | 0.226 8928 | 73  | 1.274 0904 | 133  | 2.321 2879 | 13       | 0.003 7815 | 13       | 0.000 0630 |
| 14       | 0.244 3461 | 74  | 1.291 5436 | 134  | 2.338 7412 | 14       | 0.004 0724 | 14       | 0.000 0679 |
| 15       | 0.261 7994 | 75  | 1.308 9969 | 135  | 2.356 1945 | 15       | 0.004 3633 | 15       | 0.000 0727 |
| 16       | 0.279 2527 | 76  | 1.326 4502 | 136  | 2.373 6478 | 16       | 0.004 6542 | 16       | 0.000 0776 |
| 17       | 0.296 7060 | 77  | 1.343 9035 | 137  | 2.391 1011 | 17       | 0.004 9451 | 17       | 0.000 0824 |
| 18       | 0.314 1593 | 78  | 1.361 3568 | 138  | 2.408 5544 | 18       | 0.005 2360 | 18       | 0.000 0873 |
| 19       | 0.331 6126 | 79  | 1.378 8101 | 139  | 2.426 0077 | 19       | 0.005 5269 | 19       | 0.000 0921 |
| 20       | 0.349 0659 | 80  | 1.396 2634 | 140  | 2.443 4610 | 20       | 0.005 8178 | 20       | 0.000 0970 |
| 21       | 0.366 5191 | 81  | 1.413 7167 | 141  | 2.460 9142 | 21       | 0.006 1087 | 21       | 0.000 1018 |
| 22       | 0.383 9724 | 82  | 1.431 1700 | 142  | 2.478 3675 | 22       | 0.006 3995 | 22       | 0.000 1067 |
| 23       | 0.401 4257 | 83  | 1.448 6233 | 143  | 2.495 8208 | 23       | 0.006 6904 | 23       | 0.000 1115 |
| 24       | 0.418 8790 | 84  | 1.466 0766 | 144  | 2.513 2741 | 24       | 0.006 9813 | 24       | 0.000 1164 |
| 25       | 0.436 3323 | 85  | 1.483 5299 | 145  | 2.530 7274 | 25       | 0.007 2722 | 25       | 0.000 1212 |
| 26       | 0.453 7856 | 86  | 1.500 9832 | 146  | 2.548 1807 | 26       | 0.007 5631 | 26       | 0.000 1261 |
| 27       | 0.471 2389 | 87  | 1.518 4364 | 147  | 2.565 6340 | 27       | 0.007 8540 | 27       | 0.000 1309 |
| 28       | 0.488 6922 | 88  | 1.535 8897 | 148  | 2.583 0873 | 28       | 0.008 1449 | 28       | 0.000 1357 |
| 29       | 0.506 1455 | 89  | 1.553 3430 | 149  | 2.600 5406 | 29       | 0.008 4358 | 29       | 0.000 1406 |
| 30       | 0.523 5988 | 90  | 1.570 7963 | 150  | 2.617 9939 | 30       | 0.008 7266 | 30       | 0.000 1454 |
| 31       | 0.541 0521 | 91  | 1.588 2496 | 151  | 2.635 4472 | 31       | 0.009 0175 | 31       | 0.000 1503 |
| 32       | 0.558 5054 | 92  | 1.605 7029 | 152  | 2.652 9005 | 32       | 0.009 3084 | 32       | 0.000 1551 |
| 33       | 0.575 9587 | 93  | 1.623 1562 | 153  | 2.670 3538 | 33       | 0.009 5993 | 33       | 0.000 1600 |
| 34       | 0.593 4119 | 94  | 1.640 6095 | 154  | 2.687 8070 | 34       | 0.009 8902 | 34       | 0.000 1648 |
| 35       | 0.610 8652 | 95  | 1.658 0628 | 155  | 2.705 2603 | 35       | 0.010 1811 | 35       | 0.000 1697 |
| 36       | 0.628 3185 | 96  | 1.675 5161 | 156  | 2.722 7136 | 36       | 0.010 4720 | 36       | 0.000 1745 |
| 37       | 0.645 7718 | 97  | 1.692 9694 | 157  | 2.740 1669 | 37       | 0.010 7629 | 37       | 0.000 1794 |
| 38       | 0.663 2251 | 98  | 1.710 4227 | 158  | 2.757 6202 | 38       | 0.011 0538 | 38       | 0.000 1842 |
| 39       | 0.680 6784 | 99  | 1.727 8760 | 159  | 2.775 0735 | 39       | 0.011 3446 | 39       | 0.000 1891 |
| 40       | 0.698 1317 | 100 | 1.745 3293 | 160  | 2.792 5268 | 40       | 0.011 6355 | 40       | 0.000 1939 |
| 41       | 0.715 5850 | 101 | 1.762 7825 | 161  | 2.809 9801 | 41       | 0.011 9264 | 41       | 0.000 1988 |
| 42       | 0.733 0383 | 102 | 1.780 2358 | 162  | 2.827 4334 | 42       | 0.012 2173 | 42       | 0.000 2036 |
| 43       | 0.750 4916 | 103 | 1.797 6891 | 163  | 2.844 8867 | 43       | 0.012 5082 | 43       | 0.000 2085 |
| 44       | 0.767 9449 | 104 | 1.815 1424 | 164  | 2.862 3400 | 44       | 0.012 7991 | 44       | 0.000 2133 |
| 45       | 0.785 3982 | 105 | 1.832 5957 | 165  | 2.879 7933 | 45       | 0.013 0900 | 45       | 0.000 2182 |
| 46       | 0.802 8515 | 106 | 1.850 0490 | 166  | 2.897 2466 | 46       | 0.013 3809 | 46       | 0.000 2230 |
| 47       | 0.820 3047 | 107 | 1.867 5023 | 167  | 2.914 6999 | 47       | 0.013 6717 | 47       | 0.000 2279 |
| 48       | 0.837 7580 | 108 | 1.884 9556 | 168  | 2.932 1531 | 48       | 0.013 9626 | 48       | 0.000 2327 |
| 49       | 0.855 2113 | 109 | 1.902 4089 | 169  | 2.949 6064 | 49       | 0.014 2535 | 49       | 0.000 2376 |
| 50       | 0.872 6646 | 110 | 1.919 8622 | 170  | 2.967 0597 | 50       | 0.014 5444 | 50       | 0.000 2424 |
| 51       | 0.890 1179 | 111 | 1.937 3155 | 171  | 2.984 5130 | 51       | 0.014 8353 | 51       | 0.000 2473 |
| 52       | 0.907 5712 | 112 | 1.954 7688 | 172  | 3.001 9663 | 52       | 0.015 1262 | 52       | 0.000 2521 |
| 53       | 0.925 0245 | 113 | 1.972 2221 | 173  | 3.019 4196 | 53       | 0.015 4171 | 53       | 0.000 2570 |
| 54       | 0.942 4778 | 114 | 1.989 6753 | 174  | 3.036 8729 | 54       | 0.015 7080 | 54       | 0.000 2618 |
| 55       | 0.959 9311 | 115 | 2.007 1286 | 175  | 3.054 3262 | 55       | 0.015 9989 | 55       | 0.000 2666 |
| 56       | 0.977 3844 | 116 | 2.024 5819 | 176  | 3.071 7795 | 56       | 0.016 2897 | 56       | 0.000 2715 |
| 57       | 0.994 8377 | 117 | 2.042 0352 | 177  | 3.089 2328 | 57       | 0.016 5806 | 57       | 0.000 2763 |
| 58       | 1.012 2910 | 118 | 2.059 4885 | 178  | 3.106 6861 | 58       | 0.016 8715 | 58       | 0.000 2812 |
| 59       | 1.029 7443 | 119 | 2.076 9418 | 179  | 3.124 1394 | 59       | 0.017 1624 | 59       | 0.000 2860 |
| 60       | 1.047 1976 | 120 | 2.094 3951 | 180  | 3.141 5927 | 60       | 0.017 4533 | 60       | 0.000 2909 |



III.

LOGARITHMS

OF THE TRIGONOMETRICAL

F U N C T I O N S

FROM TEN TO TEN SECONDS.



|    | "  | Sh         | d.      | Tang       | d. e    | Colg       | Gas        | "  | "  |
|----|----|------------|---------|------------|---------|------------|------------|----|----|
| 0  | 0  |            |         |            |         |            |            | 0  | 60 |
|    | 10 | 5.685 5749 | 1000000 | 5.685 5749 | 1000000 | 4.114 4551 | 1000000000 | 50 |    |
|    | 20 | 5.986 6061 | 1760000 | 5.986 6061 | 1760000 | 4.014 3939 | 1000000000 | 40 |    |
|    | 30 | 6.161 6961 | 1290000 | 6.161 6961 | 1290000 | 3.914 3014 | 1000000000 | 30 |    |
|    | 40 | 6.287 6449 | 960000  | 6.287 6449 | 960000  | 3.814 1817 | 1000000000 | 20 |    |
|    | 50 | 6.384 5449 | 790000  | 6.384 5449 | 790000  | 3.715 2214 | 1000000000 | 10 |    |
| 1  | 0  | 6.461 7261 | 660000  | 6.461 7261 | 660000  | 3.516 5219 | 1000000000 | 0  | 59 |
|    | 10 | 6.530 6729 | 579900  | 6.530 6729 | 579900  | 3.414 1218 | 1000000000 | 50 |    |
|    | 20 | 6.588 6648 | 511500  | 6.588 6648 | 511500  | 3.314 1313 | 1000000000 | 40 |    |
|    | 30 | 6.639 8179 | 457500  | 6.639 8179 | 457500  | 3.215 4056 | 1000000000 | 30 |    |
|    | 40 | 6.685 5748 | 411900  | 6.685 5748 | 411900  | 3.114 3353 | 1000000000 | 20 |    |
|    | 50 | 6.726 9675 | 372800  | 6.726 9675 | 372800  | 3.014 1153 | 1000000000 | 10 |    |
| 2  | 0  | 6.764 7561 | 342000  | 6.764 7561 | 342000  | 2.915 6457 | 1000000000 | 0  | 58 |
|    | 10 | 6.799 5182 | 321000  | 6.799 5182 | 321000  | 2.815 2551 | 1000000000 | 50 |    |
|    | 20 | 6.831 7029 | 300000  | 6.831 7029 | 300000  | 2.714 3050 | 1000000000 | 40 |    |
|    | 30 | 6.861 6661 | 280000  | 6.861 6661 | 280000  | 2.614 1151 | 1000000000 | 30 |    |
|    | 40 | 6.889 6948 | 260000  | 6.889 6948 | 260000  | 2.514 1151 | 1000000000 | 20 |    |
|    | 50 | 6.916 6517 | 240000  | 6.916 6517 | 240000  | 2.414 2151 | 1000000000 | 10 |    |
| 3  | 0  | 6.940 8473 | 220000  | 6.940 8473 | 220000  | 2.314 2151 | 1000000000 | 0  | 57 |
|    | 10 | 6.964 3284 | 200000  | 6.964 3284 | 200000  | 2.214 2151 | 1000000000 | 50 |    |
|    | 20 | 6.986 6038 | 180000  | 6.986 6038 | 180000  | 2.114 2151 | 1000000000 | 40 |    |
|    | 30 | 7.007 7944 | 160000  | 7.007 7944 | 160000  | 2.014 2151 | 1000000000 | 30 |    |
|    | 40 | 7.027 9975 | 140000  | 7.027 9975 | 140000  | 1.914 2151 | 1000000000 | 20 |    |
|    | 50 | 7.047 3026 | 120000  | 7.047 3026 | 120000  | 1.814 2151 | 1000000000 | 10 |    |
| 4  | 0  | 7.065 7860 | 100000  | 7.065 7860 | 100000  | 1.714 2151 | 1000000000 | 0  | 56 |
|    | 10 | 7.083 5148 | 90000   | 7.083 5148 | 90000   | 1.614 2151 | 1000000000 | 50 |    |
|    | 20 | 7.100 5481 | 80000   | 7.100 5481 | 80000   | 1.514 2151 | 1000000000 | 40 |    |
|    | 30 | 7.116 9386 | 70000   | 7.116 9386 | 70000   | 1.414 2151 | 1000000000 | 30 |    |
|    | 40 | 7.132 7328 | 60000   | 7.132 7328 | 60000   | 1.314 2151 | 1000000000 | 20 |    |
|    | 50 | 7.147 9227 | 50000   | 7.147 9227 | 50000   | 1.214 2151 | 1000000000 | 10 |    |
| 5  | 0  | 7.162 6960 | 40000   | 7.162 6960 | 40000   | 1.114 2151 | 1000000000 | 0  | 55 |
|    | 10 | 7.176 9361 | 30000   | 7.176 9361 | 30000   | 1.014 2151 | 1000000000 | 50 |    |
|    | 20 | 7.190 7247 | 20000   | 7.190 7247 | 20000   | 0.914 2151 | 1000000000 | 40 |    |
|    | 30 | 7.204 0886 | 10000   | 7.204 0886 | 10000   | 0.814 2151 | 1000000000 | 30 |    |
|    | 40 | 7.217 0536 | 0       | 7.217 0536 | 0       | 0.714 2151 | 1000000000 | 20 |    |
|    | 50 | 7.229 6227 |         | 7.229 6227 |         | 0.614 2151 | 1000000000 | 10 |    |
| 6  | 0  | 7.241 8771 |         | 7.241 8771 |         | 0.514 2151 | 1000000000 | 0  | 54 |
|    | 10 | 7.253 7764 |         | 7.253 7764 |         | 0.414 2151 | 1000000000 | 50 |    |
|    | 20 | 7.265 3582 |         | 7.265 3582 |         | 0.314 2151 | 1000000000 | 40 |    |
|    | 30 | 7.276 6392 |         | 7.276 6392 |         | 0.214 2151 | 1000000000 | 30 |    |
|    | 40 | 7.287 6346 |         | 7.287 6346 |         | 0.114 2151 | 1000000000 | 20 |    |
|    | 50 | 7.298 3584 |         | 7.298 3584 |         | 0.014 2151 | 1000000000 | 10 |    |
| 7  | 0  | 7.308 8239 |         | 7.308 8239 |         | 0.000 0000 | 1000000000 | 0  | 53 |
|    | 10 | 7.319 0430 |         | 7.319 0430 |         | 0.000 0000 | 1000000000 | 50 |    |
|    | 20 | 7.329 0272 |         | 7.329 0272 |         | 0.000 0000 | 1000000000 | 40 |    |
|    | 30 | 7.338 7870 |         | 7.338 7870 |         | 0.000 0000 | 1000000000 | 30 |    |
|    | 40 | 7.348 1323 |         | 7.348 1323 |         | 0.000 0000 | 1000000000 | 20 |    |
|    | 50 | 7.357 0723 |         | 7.357 0723 |         | 0.000 0000 | 1000000000 | 10 |    |
| 8  | 0  | 7.366 8157 |         | 7.366 8157 |         | 0.000 0000 | 1000000000 | 0  | 52 |
|    | 10 | 7.375 7705 |         | 7.375 7705 |         | 0.000 0000 | 1000000000 | 50 |    |
|    | 20 | 7.384 5444 |         | 7.384 5444 |         | 0.000 0000 | 1000000000 | 40 |    |
|    | 30 | 7.393 1446 |         | 7.393 1446 |         | 0.000 0000 | 1000000000 | 30 |    |
|    | 40 | 7.401 5778 |         | 7.401 5778 |         | 0.000 0000 | 1000000000 | 20 |    |
|    | 50 | 7.409 8503 |         | 7.409 8503 |         | 0.000 0000 | 1000000000 | 10 |    |
| 9  | 0  | 7.417 9681 |         | 7.417 9681 |         | 0.000 0000 | 1000000000 | 0  | 51 |
|    | 10 | 7.425 9370 |         | 7.425 9370 |         | 0.000 0000 | 1000000000 | 50 |    |
|    | 20 | 7.433 7624 |         | 7.433 7624 |         | 0.000 0000 | 1000000000 | 40 |    |
|    | 30 | 7.441 4492 |         | 7.441 4492 |         | 0.000 0000 | 1000000000 | 30 |    |
|    | 40 | 7.449 0023 |         | 7.449 0023 |         | 0.000 0000 | 1000000000 | 20 |    |
|    | 50 | 7.456 4261 |         | 7.456 4261 |         | 0.000 0000 | 1000000000 | 10 |    |
| 10 | 0  | 7.463 7255 |         | 7.463 7255 |         | 0.000 0000 | 1000000000 | 0  | 50 |
|    |    |            |         |            |         |            |            |    |    |
|    |    | Con        | d.      | Colg       | d. e    | Tang       | Gas        |    |    |



|    | "  | Sin        | d.    | Tang       | d. c. | Cotg       | Cos        | "  |    |
|----|----|------------|-------|------------|-------|------------|------------|----|----|
| 10 | 0  | 7.463 7255 | 71786 | 7.463 7273 | 71787 | 2.536 2727 | 9.999 9982 | 0  | 50 |
|    | 10 | 7.470 9041 | 70618 | 7.470 9060 | 70619 | 2.520 0940 | 9.999 9981 | 50 |    |
|    | 20 | 7.477 9659 | 69488 | 7.477 9679 | 69489 | 2.522 0321 | 9.999 9980 | 40 |    |
|    | 30 | 7.484 9147 | 68394 | 7.484 9168 | 68394 | 2.515 0832 | 9.999 9980 | 30 |    |
|    | 40 | 7.491 7541 | 67334 | 7.491 7562 | 67335 | 2.508 2438 | 9.999 9979 | 20 |    |
|    | 50 | 7.498 4875 | 66306 | 7.498 4897 | 66306 | 2.501 5103 | 9.999 9978 | 10 |    |
| 11 | 0  | 7.505 1181 | 65308 | 7.505 1203 | 65309 | 2.494 8797 | 9.999 9978 | 0  | 49 |
|    | 10 | 7.511 6489 | 64341 | 7.511 6512 | 64342 | 2.488 3488 | 9.999 9977 | 50 |    |
|    | 20 | 7.518 0830 | 63401 | 7.518 0854 | 63402 | 2.481 9146 | 9.999 9976 | 40 |    |
|    | 30 | 7.524 4231 | 62490 | 7.524 4256 | 62490 | 2.475 5744 | 9.999 9976 | 30 |    |
|    | 40 | 7.530 6721 | 61603 | 7.530 6746 | 61603 | 2.469 3254 | 9.999 9975 | 20 |    |
|    | 50 | 7.536 8324 | 60741 | 7.536 8349 | 60742 | 2.463 1651 | 9.999 9974 | 10 |    |
| 12 | 0  | 7.542 9065 | 59903 | 7.542 9091 | 59904 | 2.457 0909 | 9.999 9974 | 0  | 48 |
|    | 10 | 7.548 8668 | 59089 | 7.548 8695 | 59089 | 2.451 1005 | 9.999 9973 | 50 |    |
|    | 20 | 7.554 8057 | 58295 | 7.554 8084 | 58296 | 2.445 1916 | 9.999 9972 | 40 |    |
|    | 30 | 7.560 6352 | 57523 | 7.560 6380 | 57524 | 2.439 3620 | 9.999 9971 | 30 |    |
|    | 40 | 7.566 3875 | 56771 | 7.566 3904 | 56772 | 2.433 6096 | 9.999 9971 | 20 |    |
|    | 50 | 7.572 0646 | 56038 | 7.572 0676 | 56039 | 2.427 9324 | 9.999 9970 | 10 |    |
| 13 | 0  | 7.577 6684 | 55325 | 7.577 6715 | 55326 | 2.422 3285 | 9.999 9969 | 0  | 47 |
|    | 10 | 7.583 2009 | 54629 | 7.583 2041 | 54629 | 2.416 7959 | 9.999 9968 | 50 |    |
|    | 20 | 7.588 6638 | 53950 | 7.588 6670 | 53951 | 2.411 3330 | 9.999 9967 | 40 |    |
|    | 30 | 7.594 0588 | 53288 | 7.594 0621 | 53289 | 2.405 9379 | 9.999 9967 | 30 |    |
|    | 40 | 7.599 3876 | 52642 | 7.599 3910 | 52643 | 2.400 6090 | 9.999 9966 | 20 |    |
|    | 50 | 7.604 6518 | 52012 | 7.604 6553 | 52013 | 2.395 3447 | 9.999 9965 | 10 |    |
| 14 | 0  | 7.609 8530 | 51396 | 7.609 8566 | 51397 | 2.390 1434 | 9.999 9964 | 0  | 46 |
|    | 10 | 7.614 9926 | 50795 | 7.614 9963 | 50795 | 2.385 0037 | 9.999 9963 | 50 |    |
|    | 20 | 7.620 0721 | 50207 | 7.620 0758 | 50209 | 2.379 9242 | 9.999 9962 | 40 |    |
|    | 30 | 7.625 0928 | 49634 | 7.625 0967 | 49635 | 2.374 9033 | 9.999 9961 | 30 |    |
|    | 40 | 7.630 0562 | 49073 | 7.630 0602 | 49074 | 2.369 9398 | 9.999 9960 | 20 |    |
|    | 50 | 7.634 9635 | 48525 | 7.634 9676 | 48525 | 2.365 0324 | 9.999 9960 | 10 |    |
| 15 | 0  | 7.639 8160 | 47989 | 7.639 8201 | 47990 | 2.360 1799 | 9.999 9959 | 0  | 45 |
|    | 10 | 7.644 6149 | 47464 | 7.644 6191 | 47465 | 2.355 3809 | 9.999 9958 | 50 |    |
|    | 20 | 7.649 3613 | 46950 | 7.649 3656 | 46952 | 2.350 6344 | 9.999 9957 | 40 |    |
|    | 30 | 7.654 0563 | 46449 | 7.654 0608 | 46449 | 2.345 9392 | 9.999 9956 | 30 |    |
|    | 40 | 7.658 7012 | 45957 | 7.658 7057 | 45958 | 2.341 2943 | 9.999 9955 | 20 |    |
|    | 50 | 7.663 2969 | 45476 | 7.663 3015 | 45477 | 2.336 6985 | 9.999 9954 | 10 |    |
| 16 | 0  | 7.667 8445 | 45005 | 7.667 8492 | 45006 | 2.332 1508 | 9.999 9953 | 0  | 44 |
|    | 10 | 7.672 3450 | 44543 | 7.672 3498 | 44544 | 2.327 6502 | 9.999 9952 | 50 |    |
|    | 20 | 7.676 7993 | 44091 | 7.676 8042 | 44092 | 2.323 1958 | 9.999 9951 | 40 |    |
|    | 30 | 7.681 2084 | 43648 | 7.681 2134 | 43649 | 2.318 7866 | 9.999 9950 | 30 |    |
|    | 40 | 7.685 5732 | 43213 | 7.685 5783 | 43214 | 2.314 4217 | 9.999 9949 | 20 |    |
|    | 50 | 7.689 8945 | 42788 | 7.689 8997 | 42789 | 2.310 1003 | 9.999 9948 | 10 |    |
| 17 | 0  | 7.694 1733 | 42370 | 7.694 1786 | 42371 | 2.305 8214 | 9.999 9947 | 0  | 43 |
|    | 10 | 7.698 4103 | 41961 | 7.698 4157 | 41962 | 2.301 5843 | 9.999 9946 | 50 |    |
|    | 20 | 7.702 6064 | 41559 | 7.702 6119 | 41560 | 2.297 3881 | 9.999 9945 | 40 |    |
|    | 30 | 7.706 7623 | 41165 | 7.706 7679 | 41167 | 2.293 2321 | 9.999 9944 | 30 |    |
|    | 40 | 7.710 8788 | 40779 | 7.710 8846 | 40779 | 2.289 1154 | 9.999 9943 | 20 |    |
|    | 50 | 7.714 9567 | 40399 | 7.714 9625 | 40401 | 2.285 0375 | 9.999 9942 | 10 |    |
| 18 | 0  | 7.718 9966 | 40027 | 7.719 0026 | 40028 | 2.280 9974 | 9.999 9940 | 0  | 42 |
|    | 10 | 7.722 9993 | 39662 | 7.723 0054 | 39663 | 2.276 9946 | 9.999 9939 | 50 |    |
|    | 20 | 7.726 9655 | 39302 | 7.726 9717 | 39303 | 2.273 0283 | 9.999 9938 | 40 |    |
|    | 30 | 7.730 8957 | 38951 | 7.730 9020 | 38952 | 2.269 0980 | 9.999 9937 | 30 |    |
|    | 40 | 7.734 7908 | 38603 | 7.734 7972 | 38605 | 2.265 2028 | 9.999 9936 | 20 |    |
|    | 50 | 7.738 6511 | 38264 | 7.738 6577 | 38264 | 2.261 3423 | 9.999 9935 | 10 |    |
| 19 | 0  | 7.742 4775 | 37930 | 7.742 4841 | 37931 | 2.257 5159 | 9.999 9934 | 0  | 41 |
|    | 10 | 7.746 2705 | 37601 | 7.746 2772 | 37602 | 2.253 7228 | 9.999 9933 | 50 |    |
|    | 20 | 7.750 0306 | 37278 | 7.750 0374 | 37280 | 2.249 9626 | 9.999 9931 | 40 |    |
|    | 30 | 7.753 7584 | 36961 | 7.753 7654 | 36962 | 2.246 2346 | 9.999 9930 | 30 |    |
|    | 40 | 7.757 4545 | 36649 | 7.757 4616 | 36650 | 2.242 5384 | 9.999 9929 | 20 |    |
|    | 50 | 7.761 1194 | 36343 | 7.761 1266 | 36344 | 2.238 8734 | 9.999 9928 | 10 |    |
| 20 | 0  | 7.764 7537 |       | 7.764 7610 |       | 2.235 2390 | 9.999 9927 | 0  | 40 |
|    | "  | Cos        | d.    | Cotg       | d.    | Tang       | Sin        | "  |    |



|    |    | sin        | d.    | Tang       | d.    | Coig       | Coa        |    |    |
|----|----|------------|-------|------------|-------|------------|------------|----|----|
| 20 | 0  | 7.764 7537 | 36034 | 7.764 7540 | 36034 | 2.315 2122 | 9.999 9937 | 0  | 40 |
|    | 10 | 7.768 1577 | 35745 | 7.768 1581 | 35745 | 2.314 6143 | 9.999 9935 | 50 |    |
|    | 20 | 7.771 9122 | 35455 | 7.771 9126 | 35455 | 2.313 0163 | 9.999 9933 | 40 |    |
|    | 30 | 7.775 4774 | 35165 | 7.775 4778 | 35165 | 2.311 4183 | 9.999 9931 | 30 |    |
|    | 40 | 7.778 9919 | 34883 | 7.778 9923 | 34883 | 2.309 8203 | 9.999 9929 | 20 |    |
|    | 50 | 7.782 4821 | 34608 | 7.782 4825 | 34608 | 2.308 2223 | 9.999 9927 | 10 |    |
| 21 | 0  | 7.785 9122 | 34341 | 7.785 9126 | 34341 | 2.306 6243 | 9.999 9925 | 0  | 39 |
|    | 10 | 7.789 3758 | 34073 | 7.789 3762 | 34073 | 2.305 0263 | 9.999 9923 | 50 |    |
|    | 20 | 7.792 7810 | 33804 | 7.792 7814 | 33804 | 2.303 4283 | 9.999 9921 | 40 |    |
|    | 30 | 7.796 1617 | 33536 | 7.796 1621 | 33536 | 2.301 8303 | 9.999 9919 | 30 |    |
|    | 40 | 7.799 5151 | 33279 | 7.799 5155 | 33279 | 2.300 2323 | 9.999 9917 | 20 |    |
|    | 50 | 7.802 8412 | 33026 | 7.802 8416 | 33026 | 2.298 6343 | 9.999 9915 | 10 |    |
| 22 | 0  | 7.806 1488 | 32777 | 7.806 1492 | 32777 | 2.297 0363 | 9.999 9913 | 0  | 38 |
|    | 10 | 7.809 4415 | 32531 | 7.809 4419 | 32531 | 2.295 4383 | 9.999 9911 | 50 |    |
|    | 20 | 7.812 6706 | 32289 | 7.812 6710 | 32289 | 2.293 8403 | 9.999 9909 | 40 |    |
|    | 30 | 7.815 8353 | 32051 | 7.815 8357 | 32051 | 2.292 2423 | 9.999 9907 | 30 |    |
|    | 40 | 7.819 1206 | 31816 | 7.819 1210 | 31816 | 2.290 6443 | 9.999 9905 | 20 |    |
|    | 50 | 7.822 2922 | 31585 | 7.822 2926 | 31585 | 2.289 0463 | 9.999 9903 | 10 |    |
| 23 | 0  | 7.825 4507 | 31357 | 7.825 4511 | 31357 | 2.287 4483 | 9.999 9901 | 0  | 37 |
|    | 10 | 7.828 5864 | 31133 | 7.828 5868 | 31133 | 2.285 8503 | 9.999 9899 | 50 |    |
|    | 20 | 7.831 6996 | 30912 | 7.831 7000 | 30912 | 2.284 2523 | 9.999 9897 | 40 |    |
|    | 30 | 7.834 7006 | 30694 | 7.834 7010 | 30694 | 2.282 6543 | 9.999 9895 | 30 |    |
|    | 40 | 7.837 6908 | 30479 | 7.837 6912 | 30479 | 2.281 0563 | 9.999 9893 | 20 |    |
|    | 50 | 7.840 6712 | 30266 | 7.840 6716 | 30266 | 2.279 4583 | 9.999 9891 | 10 |    |
| 24 | 0  | 7.843 6418 | 30056 | 7.843 6422 | 30056 | 2.277 8603 | 9.999 9889 | 0  | 36 |
|    | 10 | 7.846 6019 | 29848 | 7.846 6023 | 29848 | 2.276 2623 | 9.999 9887 | 50 |    |
|    | 20 | 7.849 5521 | 29643 | 7.849 5525 | 29643 | 2.274 6643 | 9.999 9885 | 40 |    |
|    | 30 | 7.852 4928 | 29441 | 7.852 4932 | 29441 | 2.273 0663 | 9.999 9883 | 30 |    |
|    | 40 | 7.855 4240 | 29241 | 7.855 4244 | 29241 | 2.271 4683 | 9.999 9881 | 20 |    |
|    | 50 | 7.858 3471 | 29043 | 7.858 3475 | 29043 | 2.269 8703 | 9.999 9879 | 10 |    |
| 25 | 0  | 7.861 2621 | 28848 | 7.861 2625 | 28848 | 2.268 2723 | 9.999 9877 | 0  | 35 |
|    | 10 | 7.864 1779 | 28656 | 7.864 1783 | 28656 | 2.266 6743 | 9.999 9875 | 50 |    |
|    | 20 | 7.867 0845 | 28467 | 7.867 0849 | 28467 | 2.265 0763 | 9.999 9873 | 40 |    |
|    | 30 | 7.869 9821 | 28281 | 7.869 9825 | 28281 | 2.263 4783 | 9.999 9871 | 30 |    |
|    | 40 | 7.872 8708 | 28097 | 7.872 8712 | 28097 | 2.261 8803 | 9.999 9869 | 20 |    |
|    | 50 | 7.875 7508 | 27915 | 7.875 7512 | 27915 | 2.260 2823 | 9.999 9867 | 10 |    |
| 26 | 0  | 7.878 6212 | 27735 | 7.878 6216 | 27735 | 2.258 6843 | 9.999 9865 | 0  | 34 |



|    | "  | d.         | Tang  | d. c.      | Cotg  | Coa        | "          |    |
|----|----|------------|-------|------------|-------|------------|------------|----|
| 30 | 0  | 7.940 8419 | 24060 | 7.940 8584 | 24062 | 2.059 1416 | 9.999 9835 | 0  |
|    | 10 | 7.943 2479 | 23927 | 7.943 2646 | 23929 | 2.056 7354 | 9.999 9833 | 50 |
|    | 20 | 7.945 6406 | 23797 | 7.945 6575 | 23799 | 2.054 3425 | 9.999 9831 | 40 |
|    | 30 | 7.948 0203 | 23666 | 7.948 0374 | 23668 | 2.051 9626 | 9.999 9829 | 30 |
|    | 40 | 7.950 3869 | 23539 | 7.950 4042 | 23540 | 2.049 5958 | 9.999 9827 | 20 |
|    | 50 | 7.952 7408 | 23411 | 7.952 7582 | 23414 | 2.047 2418 | 9.999 9825 | 10 |
| 31 | 0  | 7.955 0819 | 23286 | 7.955 0995 | 23288 | 2.044 9004 | 9.999 9823 | 0  |
|    | 10 | 7.957 4105 | 23162 | 7.957 4284 | 23163 | 2.042 5716 | 9.999 9822 | 50 |
|    | 20 | 7.959 7267 | 23039 | 7.959 7447 | 23041 | 2.040 2553 | 9.999 9820 | 40 |
|    | 30 | 7.962 0306 | 22917 | 7.962 0488 | 22920 | 2.037 9512 | 9.999 9818 | 30 |
|    | 40 | 7.964 3223 | 22797 | 7.964 3408 | 22798 | 2.035 6592 | 9.999 9816 | 20 |
|    | 50 | 7.966 6020 | 22678 | 7.966 6206 | 22680 | 2.033 3794 | 9.999 9814 | 10 |
| 32 | 0  | 7.968 8698 | 22560 | 7.968 8886 | 22563 | 2.031 1114 | 9.999 9812 | 0  |
|    | 10 | 7.971 1258 | 22444 | 7.971 1449 | 22445 | 2.028 8551 | 9.999 9810 | 50 |
|    | 20 | 7.973 3702 | 22328 | 7.973 3894 | 22330 | 2.026 6106 | 9.999 9808 | 40 |
|    | 30 | 7.975 6030 | 22214 | 7.975 6224 | 22216 | 2.024 3776 | 9.999 9806 | 30 |
|    | 40 | 7.977 8244 | 22101 | 7.977 8440 | 22103 | 2.022 1560 | 9.999 9804 | 20 |
|    | 50 | 7.980 0345 | 21989 | 7.980 0543 | 21991 | 2.019 9457 | 9.999 9802 | 10 |
| 33 | 0  | 7.982 2334 | 21878 | 7.982 2534 | 21880 | 2.017 7466 | 9.999 9800 | 0  |
|    | 10 | 7.984 4212 | 21769 | 7.984 4414 | 21771 | 2.015 5586 | 9.999 9798 | 50 |
|    | 20 | 7.986 5981 | 21660 | 7.986 6185 | 21662 | 2.013 3815 | 9.999 9796 | 40 |
|    | 30 | 7.988 7641 | 21552 | 7.988 7847 | 21554 | 2.011 2153 | 9.999 9794 | 30 |
|    | 40 | 7.990 9193 | 21446 | 7.990 9401 | 21448 | 2.009 0599 | 9.999 9792 | 20 |
|    | 50 | 7.993 0639 | 21341 | 7.993 0849 | 21343 | 2.006 9151 | 9.999 9790 | 10 |
| 34 | 0  | 7.995 1980 | 21236 | 7.995 2192 | 21238 | 2.004 7808 | 9.999 9788 | 0  |
|    | 10 | 7.997 3216 | 21133 | 7.997 3430 | 21135 | 2.002 6570 | 9.999 9786 | 50 |
|    | 20 | 7.999 4349 | 21030 | 7.999 4565 | 21033 | 2.000 5435 | 9.999 9783 | 40 |
|    | 30 | 8.001 5379 | 20929 | 8.001 5598 | 20931 | 1.998 4402 | 9.999 9781 | 30 |
|    | 40 | 8.003 6308 | 20829 | 8.003 6529 | 20831 | 1.996 3471 | 9.999 9779 | 20 |
|    | 50 | 8.005 7137 | 20730 | 8.005 7360 | 20732 | 1.994 2640 | 9.999 9777 | 10 |
| 35 | 0  | 8.007 7867 | 20630 | 8.007 8092 | 20633 | 1.992 1908 | 9.999 9775 | 0  |
|    | 10 | 8.009 8497 | 20534 | 8.009 8725 | 20535 | 1.990 1275 | 9.999 9773 | 50 |
|    | 20 | 8.011 9031 | 20437 | 8.011 9260 | 20439 | 1.988 0740 | 9.999 9771 | 40 |
|    | 30 | 8.013 9468 | 20340 | 8.013 9699 | 20343 | 1.986 0301 | 9.999 9768 | 30 |
|    | 40 | 8.015 9808 | 20247 | 8.016 0042 | 20249 | 1.983 9958 | 9.999 9766 | 20 |
|    | 50 | 8.018 0055 | 20152 | 8.018 0291 | 20154 | 1.981 9709 | 9.999 9764 | 10 |
| 36 | 0  | 8.020 0207 | 20059 | 8.020 0445 | 20061 | 1.979 9555 | 9.999 9762 | 0  |
|    | 10 | 8.022 0266 | 19967 | 8.022 0506 | 19969 | 1.977 9494 | 9.999 9760 | 50 |
|    | 20 | 8.024 0233 | 19875 | 8.024 0475 | 19878 | 1.975 9525 | 9.999 9757 | 40 |
|    | 30 | 8.026 0108 | 19785 | 8.026 0353 | 19787 | 1.973 9647 | 9.999 9755 | 30 |
|    | 40 | 8.027 9803 | 19695 | 8.028 0140 | 19698 | 1.971 9860 | 9.999 9753 | 20 |
|    | 50 | 8.029 9588 | 19607 | 8.029 9838 | 19608 | 1.970 0162 | 9.999 9751 | 10 |
| 37 | 0  | 8.031 9195 | 19518 | 8.031 9446 | 19521 | 1.968 0554 | 9.999 9748 | 0  |
|    | 10 | 8.033 8713 | 19430 | 8.033 8967 | 19433 | 1.966 1033 | 9.999 9746 | 50 |
|    | 20 | 8.035 8143 | 19345 | 8.035 8400 | 19346 | 1.964 1600 | 9.999 9744 | 40 |
|    | 30 | 8.037 7488 | 19258 | 8.037 7746 | 19261 | 1.962 2254 | 9.999 9742 | 30 |
|    | 40 | 8.039 6746 | 19174 | 8.039 7007 | 19176 | 1.960 2993 | 9.999 9739 | 20 |
|    | 50 | 8.041 5920 | 19089 | 8.041 6183 | 19091 | 1.958 3817 | 9.999 9737 | 10 |
| 38 | 0  | 8.043 5009 | 19005 | 8.043 5274 | 19008 | 1.956 4726 | 9.999 9735 | 0  |
|    | 10 | 8.045 4014 | 18923 | 8.045 4282 | 18925 | 1.954 5718 | 9.999 9732 | 50 |
|    | 20 | 8.047 2937 | 18841 | 8.047 3207 | 18843 | 1.952 6793 | 9.999 9730 | 40 |
|    | 30 | 8.049 1778 | 18759 | 8.049 2050 | 18762 | 1.950 7950 | 9.999 9728 | 30 |
|    | 40 | 8.051 0537 | 18679 | 8.051 0812 | 18681 | 1.948 9188 | 9.999 9725 | 20 |
|    | 50 | 8.052 9216 | 18598 | 8.052 9493 | 18601 | 1.947 0507 | 9.999 9723 | 10 |
| 39 | 0  | 8.054 7814 | 18519 | 8.054 8094 | 18521 | 1.945 1906 | 9.999 9721 | 0  |
|    | 10 | 8.056 6333 | 18441 | 8.056 6615 | 18443 | 1.943 3385 | 9.999 9718 | 50 |
|    | 20 | 8.058 4774 | 18363 | 8.058 5058 | 18365 | 1.941 4942 | 9.999 9716 | 40 |
|    | 30 | 8.060 3137 | 18285 | 8.060 3423 | 18288 | 1.939 6577 | 9.999 9713 | 30 |
|    | 40 | 8.062 1422 | 18208 | 8.062 1711 | 18211 | 1.937 8289 | 9.999 9711 | 20 |
|    | 50 | 8.063 9630 | 18133 | 8.063 9922 | 18135 | 1.936 0078 | 9.999 9708 | 10 |
| 40 | 0  | 8.065 7763 |       | 8.065 8057 |       | 1.934 1943 | 9.999 9706 | 0  |
|    | "  | Coa        | d.    | Cotg       | d.    | Tang       | Sin        | "  |



|    |    | <del>Lat</del> | d.    | Tang       | d. c. | Cotg       | Coa        | a  |    |
|----|----|----------------|-------|------------|-------|------------|------------|----|----|
| 40 | 0  | 8.065 7763     | 18057 | 8.065 8047 | 18060 | 1.934 1943 | 9.999 9706 | 0  | 20 |
|    | 10 | 8.069 5820     | 17983 | 8.067 6117 | 17986 | 1.932 1883 | 9.999 9704 | 50 |    |
|    | 20 | 8.069 3803     | 17908 | 8.069 4102 | 17910 | 1.930 5308 | 9.999 9701 | 40 |    |
|    | 30 | 8.071 1711     | 17835 | 8.071 2012 | 17838 | 1.928 2983 | 9.999 9699 | 30 |    |
|    | 40 | 8.072 9546     | 17761 | 8.072 9850 | 17764 | 1.927 0150 | 9.999 9696 | 20 |    |
|    | 50 | 8.074 7307     | 17690 | 8.074 7614 | 17692 | 1.925 5186 | 9.999 9694 | 10 |    |
| 41 | 0  | 8.076 4997     | 17617 | 8.076 5306 | 17620 | 1.924 3624 | 9.999 9691 | 0  | 19 |
|    | 10 | 8.078 2614     | 17547 | 8.078 2926 | 17549 | 1.924 1074 | 9.999 9689 | 50 |    |
|    | 20 | 8.080 0161     | 17476 | 8.080 0475 | 17478 | 1.921 9545 | 9.999 9686 | 40 |    |
|    | 30 | 8.081 7647     | 17405 | 8.081 7953 | 17408 | 1.921 3042 | 9.999 9684 | 30 |    |
|    | 40 | 8.083 5042     | 17337 | 8.083 5360 | 17339 | 1.920 4549 | 9.999 9681 | 20 |    |
|    | 50 | 8.085 2379     | 17267 | 8.085 2700 | 17270 | 1.919 7100 | 9.999 9678 | 10 |    |
| 42 | 0  | 8.086 9646     | 17199 | 8.086 9970 | 17202 | 1.919 1100 | 9.999 9676 | 0  | 18 |
|    | 10 | 8.088 6845     | 17131 | 8.088 7172 | 17133 | 1.918 2638 | 9.999 9674 | 50 |    |
|    | 20 | 8.090 3976     | 17063 | 8.090 4304 | 17066 | 1.917 5645 | 9.999 9671 | 40 |    |
|    | 30 | 8.092 1040     | 16997 | 8.092 1372 | 16999 | 1.916 5628 | 9.999 9668 | 30 |    |
|    | 40 | 8.093 8037     | 16931 | 8.093 8371 | 16933 | 1.916 1639 | 9.999 9666 | 20 |    |
|    | 50 | 8.095 4968     | 16864 | 8.095 5305 | 16867 | 1.915 4395 | 9.999 9664 | 10 |    |
| 43 | 0  | 8.097 1812     | 16800 | 8.097 2152 | 16802 | 1.914 7825 | 9.999 9661 | 0  | 17 |
|    | 10 | 8.098 8642     | 16735 | 8.098 8975 | 16737 | 1.914 1025 | 9.999 9658 | 50 |    |
|    | 20 | 8.100 5467     | 16671 | 8.100 5802 | 16673 | 1.912 4288 | 9.999 9655 | 40 |    |
|    | 30 | 8.102 2238     | 16607 | 8.102 2576 | 16609 | 1.912 1614 | 9.999 9652 | 30 |    |
|    | 40 | 8.103 8945     | 16541 | 8.103 8995 | 16543 | 1.911 6035 | 9.999 9650 | 20 |    |
|    | 50 | 8.105 5588     | 16481 | 8.105 5534 | 16483 | 1.911 4415 | 9.999 9647 | 10 |    |
| 44 | 0  | 8.107 1669     | 16419 | 8.107 2025 | 16421 | 1.910 7725 | 9.999 9644 | 0  | 16 |
|    | 10 | 8.108 8088     | 16357 | 8.108 8446 | 16360 | 1.910 1554 | 9.999 9641 | 50 |    |
|    | 20 | 8.110 4445     | 16295 | 8.110 4806 | 16298 | 1.909 5822 | 9.999 9639 | 40 |    |
|    | 30 | 8.112 0740     | 16234 | 8.112 1104 | 16237 | 1.909 0826 | 9.999 9636 | 30 |    |
|    | 40 | 8.113 6974     | 16174 | 8.113 7341 | 16177 | 1.908 5639 | 9.999 9634 | 20 |    |
|    | 50 | 8.115 3148     | 16113 | 8.115 3518 | 16116 | 1.908 6424 | 9.999 9631 | 10 |    |
| 45 | 0  | 8.116 9262     | 16055 | 8.116 9634 | 16057 | 1.908 1466 | 9.999 9628 | 0  | 15 |
|    | 10 | 8.118 5317     | 15995 | 8.118 5691 | 15998 | 1.907 4400 | 9.999 9625 | 50 |    |
|    | 20 | 8.120 1312     | 15936 | 8.120 1689 | 15939 | 1.906 9411 | 9.999 9622 | 40 |    |
|    | 30 | 8.121 7248     | 15879 | 8.121 7627 | 15882 | 1.906 3471 | 9.999 9620 | 30 |    |
|    | 40 | 8.123 3127     | 15821 | 8.123 3509 | 15824 | 1.905 8290 | 9.999 9617 | 20 |    |
|    | 50 | 8.124 8947     | 15764 | 8.124 9331 | 15767 | 1.905 6652 | 9.999 9614 | 10 |    |
| 46 | 0  | 8.126 4710     | 15706 | 8.126 5099 | 15708 | 1.905 1420 | 9.999 9611 | 0  | 14 |
|    | 10 | 8.128 0416     | 15649 | 8.128 0807 | 15651 | 1.904 9005 | 9.999 9608 | 50 |    |
|    | 20 | 8.129 6068     | 15593 | 8.129 6463 | 15596 | 1.904 3444 | 9.999 9606 | 40 |    |
|    | 30 | 8.131 1658     | 15538 | 8.131 2056 | 15540 | 1.903 8442 | 9.999 9603 | 30 |    |
|    | 40 | 8.132 7196     | 15482 | 8.132 7596 | 15485 | 1.903 2800 | 9.999 9600 | 20 |    |
|    | 50 | 8.134 2678     | 15426 | 8.134 3081 | 15429 | 1.902 7422 | 9.999 9597 | 10 |    |
| 47 | 0  | 8.135 8103     | 15371 | 8.135 8510 | 15373 | 1.902 1400 | 9.999 9594 | 0  | 13 |
|    | 10 | 8.137 3477     | 15318 | 8.137 3886 | 15321 | 1.901 5841 | 9.999 9591 | 50 |    |
|    | 20 | 8.138 8795     | 15264 | 8.138 9207 | 15267 | 1.901 1001 | 9.999 9588 | 40 |    |
|    | 30 | 8.140 4059     | 15211 | 8.140 4474 | 15214 | 1.900 6046 | 9.999 9585 | 30 |    |
|    | 40 | 8.141 9270     | 15157 | 8.141 9687 | 15160 | 1.900 1011 | 9.999 9582 | 20 |    |
|    | 50 | 8.143 4427     | 15103 | 8.143 4845 | 15106 | 1.899 5834 | 9.999 9579 | 10 |    |
| 48 | 0  | 8.144 9532     | 15051 | 8.144 9956 | 15053 | 1.899 0411 | 9.999 9576 | 0  | 12 |
|    | 10 | 8.146 4585     | 15000 | 8.146 5011 | 15002 | 1.898 4982 | 9.999 9573 | 50 |    |
|    | 20 | 8.147 9586     | 14948 | 8.148 0015 | 14951 | 1.898 1005 | 9.999 9570 | 40 |    |
|    | 30 | 8.149 4534     | 14898 | 8.149 4967 | 14900 | 1.897 5043 | 9.999 9567 | 30 |    |
|    | 40 | 8.150 9432     | 14847 | 8.150 9867 | 14850 | 1.897 0111 | 9.999 9564 | 20 |    |
|    | 50 | 8.152 4279     | 14796 | 8.152 4717 | 14799 | 1.896 5189 | 9.999 9561 | 10 |    |
| 49 | 0  | 8.153 9075     | 14746 | 8.154 9516 | 14749 | 1.896 0284 | 9.999 9558 | 0  | 11 |
|    | 10 | 8.155 3821     | 14696 | 8.155 4265 | 14699 | 1.895 5315 | 9.999 9555 | 50 |    |
|    | 20 | 8.156 8517     | 14646 | 8.156 8963 | 14649 | 1.895 1036 | 9.999 9552 | 40 |    |
|    | 30 | 8.158 3163     | 14597 | 8.158 3611 | 14600 | 1.894 6187 | 9.999 9549 | 30 |    |
|    | 40 | 8.159 7768     | 14548 | 8.159 8217 | 14551 | 1.894 1287 | 9.999 9546 | 20 |    |
|    | 50 | 8.161 2308     | 14500 | 8.161 2763 | 14502 | 1.893 7112 | 9.999 9544 | 10 |    |
| 50 | 0  | 8.162 6868     | 14452 | 8.162 7327 | 14455 | 1.893 2811 | 9.999 9541 | 0  | 10 |
|    |    | Coa            | d.    | Cotg       | d.    | Tang       | 3in        |    |    |



|    | "  | Sin        | d.    | Tang       | d. c. | Cotg       | Cos        | "  |    |
|----|----|------------|-------|------------|-------|------------|------------|----|----|
| 50 | 0  | 8.162 6808 | 14451 | 8.162 7267 | 14455 | 1.837 2733 | 9.999 9541 | 0  | 10 |
|    | 10 | 8.164 1259 | 14404 | 8.164 1722 | 14406 | 1.835 8278 | 9.999 9538 | 50 |    |
|    | 20 | 8.165 5663 | 14356 | 8.165 6128 | 14359 | 1.834 3872 | 9.999 9534 | 40 |    |
|    | 30 | 8.167 0019 | 14308 | 8.167 0487 | 14312 | 1.832 9513 | 9.999 9531 | 30 |    |
|    | 40 | 8.168 4327 | 14262 | 8.168 4799 | 14265 | 1.831 5201 | 9.999 9528 | 20 |    |
|    | 50 | 8.169 8589 | 14215 | 8.169 9064 | 14218 | 1.830 0936 | 9.999 9525 | 10 |    |
| 51 | 0  | 8.171 2804 | 14168 | 8.171 3282 | 14171 | 1.828 6718 | 9.999 9522 | 0  | 9  |
|    | 10 | 8.172 6972 | 14122 | 8.172 7453 | 14126 | 1.827 2547 | 9.999 9519 | 50 |    |
|    | 20 | 8.174 1094 | 14077 | 8.174 1579 | 14079 | 1.825 8421 | 9.999 9516 | 40 |    |
|    | 30 | 8.175 5171 | 14031 | 8.175 5658 | 14035 | 1.824 4342 | 9.999 9513 | 30 |    |
|    | 40 | 8.176 9202 | 13986 | 8.176 9693 | 13989 | 1.823 0307 | 9.999 9509 | 20 |    |
|    | 50 | 8.178 3188 | 13941 | 8.178 3682 | 13944 | 1.821 6318 | 9.999 9506 | 10 |    |
| 52 | 0  | 8.179 7129 | 13896 | 8.179 7626 | 13899 | 1.820 2374 | 9.999 9503 | 0  | 8  |
|    | 10 | 8.181 1025 | 13852 | 8.181 1525 | 13856 | 1.818 8475 | 9.999 9500 | 50 |    |
|    | 20 | 8.182 4877 | 13808 | 8.182 5381 | 13811 | 1.817 4619 | 9.999 9497 | 40 |    |
|    | 30 | 8.183 8685 | 13765 | 8.183 9192 | 13767 | 1.816 0808 | 9.999 9494 | 30 |    |
|    | 40 | 8.185 2450 | 13720 | 8.185 2959 | 13724 | 1.814 7041 | 9.999 9490 | 20 |    |
|    | 50 | 8.186 6170 | 13678 | 8.186 6683 | 13681 | 1.813 3317 | 9.999 9487 | 10 |    |
| 53 | 0  | 8.187 9848 | 13634 | 8.188 0364 | 13638 | 1.811 9636 | 9.999 9484 | 0  | 7  |
|    | 10 | 8.189 3482 | 13592 | 8.189 4002 | 13595 | 1.810 5998 | 9.999 9481 | 50 |    |
|    | 20 | 8.190 7074 | 13550 | 8.190 7597 | 13553 | 1.809 2403 | 9.999 9477 | 40 |    |
|    | 30 | 8.192 0624 | 13507 | 8.192 1150 | 13510 | 1.807 8850 | 9.999 9474 | 30 |    |
|    | 40 | 8.193 4131 | 13465 | 8.193 4660 | 13469 | 1.806 5340 | 9.999 9471 | 20 |    |
|    | 50 | 8.194 7596 | 13424 | 8.194 8129 | 13427 | 1.805 1871 | 9.999 9467 | 10 |    |
| 54 | 0  | 8.196 1020 | 13383 | 8.196 1556 | 13386 | 1.803 8444 | 9.999 9464 | 0  | 6  |
|    | 10 | 8.197 4403 | 13341 | 8.197 4942 | 13344 | 1.802 5058 | 9.999 9461 | 50 |    |
|    | 20 | 8.198 7744 | 13300 | 8.198 8286 | 13304 | 1.801 1714 | 9.999 9458 | 40 |    |
|    | 30 | 8.200 1044 | 13260 | 8.200 1590 | 13263 | 1.799 8410 | 9.999 9454 | 30 |    |
|    | 40 | 8.201 4304 | 13219 | 8.201 4853 | 13223 | 1.798 5147 | 9.999 9451 | 20 |    |
|    | 50 | 8.202 7523 | 13180 | 8.202 8076 | 13183 | 1.797 1924 | 9.999 9448 | 10 |    |
| 55 | 0  | 8.204 0703 | 13139 | 8.204 1259 | 13142 | 1.795 8741 | 9.999 9444 | 0  | 5  |
|    | 10 | 8.205 3842 | 13100 | 8.205 4401 | 13104 | 1.794 5599 | 9.999 9441 | 50 |    |
|    | 20 | 8.206 6942 | 13060 | 8.206 7505 | 13063 | 1.793 2495 | 9.999 9437 | 40 |    |
|    | 30 | 8.208 0002 | 13022 | 8.208 0568 | 13025 | 1.791 9432 | 9.999 9434 | 30 |    |
|    | 40 | 8.209 3024 | 12982 | 8.209 3593 | 12986 | 1.790 6407 | 9.999 9431 | 20 |    |
|    | 50 | 8.210 6006 | 12943 | 8.210 6579 | 12947 | 1.789 3421 | 9.999 9427 | 10 |    |
| 56 | 0  | 8.211 8949 | 12905 | 8.211 9526 | 12908 | 1.788 0474 | 9.999 9424 | 0  | 4  |
|    | 10 | 8.213 1854 | 12867 | 8.213 2434 | 12870 | 1.786 7566 | 9.999 9420 | 50 |    |
|    | 20 | 8.214 4721 | 12829 | 8.214 5304 | 12833 | 1.785 4696 | 9.999 9417 | 40 |    |
|    | 30 | 8.215 7550 | 12791 | 8.215 8137 | 12794 | 1.784 1863 | 9.999 9413 | 30 |    |
|    | 40 | 8.217 0341 | 12754 | 8.217 0931 | 12757 | 1.782 9069 | 9.999 9410 | 20 |    |
|    | 50 | 8.218 3095 | 12716 | 8.218 3688 | 12720 | 1.781 6312 | 9.999 9406 | 10 |    |
| 57 | 0  | 8.219 5811 | 12679 | 8.219 6408 | 12682 | 1.780 3592 | 9.999 9403 | 0  | 3  |
|    | 10 | 8.220 8490 | 12642 | 8.220 9090 | 12646 | 1.779 0910 | 9.999 9400 | 50 |    |
|    | 20 | 8.222 1132 | 12605 | 8.222 1736 | 12609 | 1.777 8264 | 9.999 9396 | 40 |    |
|    | 30 | 8.223 3737 | 12569 | 8.223 4345 | 12572 | 1.776 5655 | 9.999 9392 | 30 |    |
|    | 40 | 8.224 6306 | 12533 | 8.224 6917 | 12536 | 1.775 3083 | 9.999 9389 | 20 |    |
|    | 50 | 8.225 8839 | 12496 | 8.225 9453 | 12500 | 1.774 0547 | 9.999 9385 | 10 |    |
| 58 | 0  | 8.227 1335 | 12461 | 8.227 1953 | 12464 | 1.772 8047 | 9.999 9382 | 0  | 2  |
|    | 10 | 8.228 3796 | 12425 | 8.228 4417 | 12429 | 1.771 5583 | 9.999 9378 | 50 |    |
|    | 20 | 8.229 6221 | 12389 | 8.229 6846 | 12393 | 1.770 3154 | 9.999 9375 | 40 |    |
|    | 30 | 8.230 8610 | 12355 | 8.230 9239 | 12358 | 1.769 0761 | 9.999 9371 | 30 |    |
|    | 40 | 8.232 0965 | 12319 | 8.232 1597 | 12323 | 1.767 8403 | 9.999 9368 | 20 |    |
|    | 50 | 8.233 3284 | 12284 | 8.233 3920 | 12288 | 1.766 6080 | 9.999 9364 | 10 |    |
| 59 | 0  | 8.234 5568 | 12250 | 8.234 6208 | 12253 | 1.765 3792 | 9.999 9360 | 0  | 1  |
|    | 10 | 8.235 7818 | 12215 | 8.235 8461 | 12219 | 1.764 1539 | 9.999 9357 | 50 |    |
|    | 20 | 8.237 0033 | 12181 | 8.237 0680 | 12185 | 1.762 9320 | 9.999 9353 | 40 |    |
|    | 30 | 8.238 2214 | 12147 | 8.238 2865 | 12150 | 1.761 7135 | 9.999 9349 | 30 |    |
|    | 40 | 8.239 4361 | 12113 | 8.239 5015 | 12117 | 1.760 4985 | 9.999 9346 | 20 |    |
|    | 50 | 8.240 6474 | 12079 | 8.240 7132 | 12083 | 1.759 2868 | 9.999 9342 | 10 |    |
| 60 | 0  | 8.241 8553 |       | 8.241 9215 |       | 1.758 0785 | 9.999 9338 | 0  | 0  |
|    | "  | Cos        | d.    | Cotg       | d.    | Tang       | Sin        | "  |    |



|    | "  | Sin        | d.    | Tang       | d. c. | Cotg       | Cos        | "  |    |
|----|----|------------|-------|------------|-------|------------|------------|----|----|
| 0  | 0  | 8.241 8553 | 12046 | 8.241 9215 | 12049 | 1.758 0785 | 9.999 9338 | 0  | 60 |
|    | 10 | 8.243 0599 | 12012 | 8.243 1264 | 12016 | 1.756 8736 | 9.999 9335 | 50 |    |
|    | 20 | 8.244 2611 | 11980 | 8.244 3280 | 11983 | 1.755 6720 | 9.999 9331 | 40 |    |
|    | 30 | 8.245 4591 | 11946 | 8.245 5263 | 11950 | 1.754 4737 | 9.999 9327 | 30 |    |
|    | 40 | 8.246 6537 | 11914 | 8.246 7213 | 11918 | 1.753 2787 | 9.999 9324 | 20 |    |
|    | 50 | 8.247 8451 | 11881 | 8.247 9131 | 11884 | 1.752 0869 | 9.999 9320 | 10 |    |
| 1  | 0  | 8.249 0332 | 11848 | 8.249 1015 | 11853 | 1.750 8985 | 9.999 9316 | 0  | 59 |
|    | 10 | 8.250 2180 | 11816 | 8.250 2868 | 11820 | 1.749 7132 | 9.999 9313 | 50 |    |
|    | 20 | 8.251 3996 | 11785 | 8.251 4688 | 11788 | 1.748 5312 | 9.999 9309 | 40 |    |
|    | 30 | 8.252 5781 | 11752 | 8.252 6476 | 11756 | 1.747 3524 | 9.999 9305 | 30 |    |
|    | 40 | 8.253 7533 | 11721 | 8.253 8232 | 11724 | 1.746 1768 | 9.999 9301 | 20 |    |
|    | 50 | 8.254 9254 | 11689 | 8.254 9956 | 11693 | 1.745 0044 | 9.999 9297 | 10 |    |
| 2  | 0  | 8.256 0943 | 11657 | 8.256 1649 | 11661 | 1.743 8351 | 9.999 9294 | 0  | 58 |
|    | 10 | 8.257 2600 | 11627 | 8.257 3310 | 11631 | 1.742 6690 | 9.999 9290 | 50 |    |
|    | 20 | 8.258 4227 | 11595 | 8.258 4941 | 11599 | 1.741 5059 | 9.999 9286 | 40 |    |
|    | 30 | 8.259 5822 | 11565 | 8.259 6540 | 11568 | 1.740 3460 | 9.999 9282 | 30 |    |
|    | 40 | 8.260 7387 | 11533 | 8.260 8108 | 11538 | 1.739 1892 | 9.999 9278 | 20 |    |
|    | 50 | 8.261 8920 | 11504 | 8.261 9646 | 11507 | 1.738 0354 | 9.999 9275 | 10 |    |
| 3  | 0  | 8.263 0424 | 11472 | 8.263 1153 | 11477 | 1.736 8847 | 9.999 9271 | 0  | 57 |
|    | 10 | 8.264 1896 | 11443 | 8.264 2630 | 11446 | 1.735 7370 | 9.999 9267 | 50 |    |
|    | 20 | 8.265 3339 | 11412 | 8.265 4076 | 11416 | 1.734 5924 | 9.999 9263 | 40 |    |
|    | 30 | 8.266 4751 | 11383 | 8.266 5492 | 11387 | 1.733 4508 | 9.999 9259 | 30 |    |
|    | 40 | 8.267 6134 | 11353 | 8.267 6879 | 11357 | 1.732 3121 | 9.999 9255 | 20 |    |
|    | 50 | 8.268 7487 | 11323 | 8.268 8236 | 11327 | 1.731 1764 | 9.999 9251 | 10 |    |
| 4  | 0  | 8.269 8810 | 11294 | 8.269 9563 | 11297 | 1.730 0437 | 9.999 9247 | 0  | 56 |
|    | 10 | 8.271 0104 | 11264 | 8.271 0860 | 11269 | 1.728 9140 | 9.999 9243 | 50 |    |
|    | 20 | 8.272 1368 | 11236 | 8.272 2129 | 11239 | 1.727 7871 | 9.999 9239 | 40 |    |
|    | 30 | 8.273 2604 | 11206 | 8.273 3368 | 11210 | 1.726 6632 | 9.999 9236 | 30 |    |
|    | 40 | 8.274 3810 | 11177 | 8.274 4578 | 11182 | 1.725 5422 | 9.999 9232 | 20 |    |
|    | 50 | 8.275 4987 | 11149 | 8.275 5760 | 11152 | 1.724 4240 | 9.999 9228 | 10 |    |
| 5  | 0  | 8.276 6136 | 11120 | 8.276 6912 | 11124 | 1.723 3088 | 9.999 9224 | 0  | 55 |
|    | 10 | 8.277 7256 | 11092 | 8.277 8036 | 11096 | 1.722 1964 | 9.999 9220 | 50 |    |
|    | 20 | 8.278 8348 | 11063 | 8.278 9132 | 11068 | 1.721 0868 | 9.999 9216 | 40 |    |
|    | 30 | 8.279 9411 | 11036 | 8.280 0200 | 11039 | 1.719 9800 | 9.999 9212 | 30 |    |
|    | 40 | 8.281 0447 | 11007 | 8.281 1239 | 11012 | 1.718 8761 | 9.999 9208 | 20 |    |
|    | 50 | 8.282 1454 | 10980 | 8.282 2251 | 10983 | 1.717 7749 | 9.999 9204 | 10 |    |
| 6  | 0  | 8.283 2434 | 10952 | 8.283 3234 | 10956 | 1.716 6766 | 9.999 9200 | 0  | 54 |
|    | 10 | 8.284 3386 | 10924 | 8.284 4190 | 10928 | 1.715 5810 | 9.999 9196 | 50 |    |
|    | 20 | 8.285 4310 | 10897 | 8.285 5118 | 10901 | 1.714 4882 | 9.999 9191 | 40 |    |
|    | 30 | 8.286 5207 | 10869 | 8.286 6019 | 10874 | 1.713 3981 | 9.999 9187 | 30 |    |
|    | 40 | 8.287 6076 | 10843 | 8.287 6893 | 10847 | 1.712 3107 | 9.999 9183 | 20 |    |
|    | 50 | 8.288 6919 | 10815 | 8.288 7740 | 10819 | 1.711 2260 | 9.999 9179 | 10 |    |
| 7  | 0  | 8.289 7734 | 10789 | 8.289 8559 | 10793 | 1.710 1441 | 9.999 9175 | 0  | 53 |
|    | 10 | 8.290 8523 | 10762 | 8.290 9352 | 10766 | 1.709 0648 | 9.999 9171 | 50 |    |
|    | 20 | 8.291 9285 | 10735 | 8.292 0118 | 10739 | 1.707 9882 | 9.999 9167 | 40 |    |
|    | 30 | 8.293 0020 | 10709 | 8.293 0857 | 10713 | 1.706 9143 | 9.999 9163 | 30 |    |
|    | 40 | 8.294 0729 | 10682 | 8.294 1570 | 10686 | 1.705 8430 | 9.999 9159 | 20 |    |
|    | 50 | 8.295 1411 | 10656 | 8.295 2256 | 10661 | 1.704 7744 | 9.999 9154 | 10 |    |
| 8  | 0  | 8.296 2067 | 10630 | 8.296 2917 | 10634 | 1.703 7083 | 9.999 9150 | 0  | 52 |
|    | 10 | 8.297 2697 | 10604 | 8.297 3551 | 10608 | 1.702 6449 | 9.999 9146 | 50 |    |
|    | 20 | 8.298 3301 | 10578 | 8.298 4159 | 10583 | 1.701 5841 | 9.999 9142 | 40 |    |
|    | 30 | 8.299 3879 | 10553 | 8.299 4742 | 10556 | 1.700 5258 | 9.999 9138 | 30 |    |
|    | 40 | 8.300 4432 | 10527 | 8.300 5298 | 10532 | 1.699 4702 | 9.999 9134 | 20 |    |
|    | 50 | 8.301 4959 | 10501 | 8.301 5830 | 10505 | 1.698 4170 | 9.999 9129 | 10 |    |
| 9  | 0  | 8.302 5460 | 10477 | 8.302 6335 | 10481 | 1.697 3665 | 9.999 9125 | 0  | 51 |
|    | 10 | 8.303 5937 | 10451 | 8.303 6816 | 10455 | 1.696 3184 | 9.999 9121 | 50 |    |
|    | 20 | 8.304 6388 | 10425 | 8.304 7271 | 10430 | 1.695 2729 | 9.999 9117 | 40 |    |
|    | 30 | 8.305 6813 | 10401 | 8.305 7701 | 10405 | 1.694 2299 | 9.999 9112 | 30 |    |
|    | 40 | 8.306 7214 | 10376 | 8.306 8106 | 10380 | 1.693 1894 | 9.999 9108 | 20 |    |
|    | 50 | 8.307 7590 | 10351 | 8.307 8486 | 10356 | 1.692 1514 | 9.999 9104 | 10 |    |
| 10 | 0  | 8.308 7941 |       | 8.308 8842 |       | 1.691 1158 | 9.999 9100 | 0  | 50 |
|    | "  | Cos        | d.    | Cotg       | d.    | Tang       | Sin        | "  |    |



|    | "  | Sin        | d.    | Tang       | d. c. | Cotg       | Cos        | "  |    |
|----|----|------------|-------|------------|-------|------------|------------|----|----|
| 10 | 0  | 8.308 7941 | 10327 | 8.308 8842 | 10331 | 1.691 1158 | 9.999 9100 | 0  | 50 |
|    | 10 | 8.309 8268 | 10302 | 8.309 9173 | 10306 | 1.690 0827 | 9.999 9095 | 50 |    |
|    | 20 | 8.310 8570 | 10278 | 8.310 9479 | 10282 | 1.689 0521 | 9.999 9091 | 40 |    |
|    | 30 | 8.311 8848 | 10253 | 8.311 9761 | 10258 | 1.688 0239 | 9.999 9087 | 30 |    |
|    | 40 | 8.312 9101 | 10230 | 8.312 0019 | 10234 | 1.686 9981 | 9.999 9082 | 20 |    |
|    | 50 | 8.313 9331 | 10205 | 8.314 0253 | 10209 | 1.685 9747 | 9.999 9078 | 10 |    |
| 11 | 0  | 8.314 9536 | 10181 | 8.315 0462 | 10186 | 1.684 9538 | 9.999 9074 | 0  | 49 |
|    | 10 | 8.315 9717 | 10158 | 8.316 0648 | 10162 | 1.683 9352 | 9.999 9069 | 50 |    |
|    | 20 | 8.316 9875 | 10133 | 8.317 0810 | 10138 | 1.682 9190 | 9.999 9065 | 40 |    |
|    | 30 | 8.318 0008 | 10111 | 8.318 0948 | 10114 | 1.681 9052 | 9.999 9061 | 30 |    |
|    | 40 | 8.319 0119 | 10086 | 8.319 1062 | 10092 | 1.680 8938 | 9.999 9056 | 20 |    |
|    | 50 | 8.320 0205 | 10064 | 8.320 1154 | 10067 | 1.679 8846 | 9.999 9052 | 10 |    |
| 12 | 0  | 8.321 0269 | 10040 | 8.321 1221 | 10045 | 1.678 8779 | 9.999 9047 | 0  | 48 |
|    | 10 | 8.322 0309 | 10017 | 8.322 1266 | 10021 | 1.677 8734 | 9.999 9043 | 50 |    |
|    | 20 | 8.323 0326 | 9993  | 8.323 1287 | 9998  | 1.676 8713 | 9.999 9039 | 40 |    |
|    | 30 | 8.324 0319 | 9971  | 8.324 1285 | 9975  | 1.675 8715 | 9.999 9034 | 30 |    |
|    | 40 | 8.325 0290 | 9948  | 8.325 1260 | 9953  | 1.674 8740 | 9.999 9030 | 20 |    |
|    | 50 | 8.326 0238 | 9925  | 8.326 1213 | 9930  | 1.673 8787 | 9.999 9025 | 10 |    |
| 13 | 0  | 8.327 0163 | 9903  | 8.327 1143 | 9907  | 1.672 8857 | 9.999 9021 | 0  | 47 |
|    | 10 | 8.328 0066 | 9880  | 8.328 1050 | 9884  | 1.671 8950 | 9.999 9016 | 50 |    |
|    | 20 | 8.328 9946 | 9858  | 8.329 0934 | 9862  | 1.670 9066 | 9.999 9012 | 40 |    |
|    | 30 | 8.329 9804 | 9835  | 8.330 0796 | 9840  | 1.669 9204 | 9.999 9007 | 30 |    |
|    | 40 | 8.330 9639 | 9813  | 8.331 0636 | 9818  | 1.668 9364 | 9.999 9003 | 20 |    |
|    | 50 | 8.331 9452 | 9791  | 8.332 0454 | 9795  | 1.667 9546 | 9.999 8998 | 10 |    |
| 14 | 0  | 8.332 9243 | 9769  | 8.333 0249 | 9774  | 1.666 9751 | 9.999 8994 | 0  | 46 |
|    | 10 | 8.333 9012 | 9747  | 8.334 0023 | 9751  | 1.665 9977 | 9.999 8989 | 50 |    |
|    | 20 | 8.334 8759 | 9725  | 8.334 9774 | 9730  | 1.665 0226 | 9.999 8985 | 40 |    |
|    | 30 | 8.335 8484 | 9703  | 8.335 9504 | 9708  | 1.664 0496 | 9.999 8980 | 30 |    |
|    | 40 | 8.336 8187 | 9682  | 8.336 9212 | 9686  | 1.663 0788 | 9.999 8976 | 20 |    |
|    | 50 | 8.337 7869 | 9660  | 8.337 8898 | 9665  | 1.662 1102 | 9.999 8971 | 10 |    |
| 15 | 0  | 8.338 7529 | 9639  | 8.338 8563 | 9643  | 1.661 1437 | 9.999 8966 | 0  | 45 |
|    | 10 | 8.339 7168 | 9617  | 8.339 8206 | 9622  | 1.660 1794 | 9.999 8962 | 50 |    |
|    | 20 | 8.340 6785 | 9597  | 8.340 7828 | 9601  | 1.659 2172 | 9.999 8957 | 40 |    |
|    | 30 | 8.341 6382 | 9575  | 8.341 7429 | 9580  | 1.658 2571 | 9.999 8953 | 30 |    |
|    | 40 | 8.342 5957 | 9553  | 8.342 7009 | 9558  | 1.657 2991 | 9.999 8948 | 20 |    |
|    | 50 | 8.343 5510 | 9533  | 8.343 6567 | 9538  | 1.656 3433 | 9.999 8943 | 10 |    |
| 16 | 0  | 8.344 5043 | 9512  | 8.344 6105 | 9516  | 1.655 3895 | 9.999 8939 | 0  | 44 |
|    | 10 | 8.345 4555 | 9492  | 8.345 5621 | 9496  | 1.654 4379 | 9.999 8934 | 50 |    |
|    | 20 | 8.346 4047 | 9470  | 8.346 5117 | 9475  | 1.653 4883 | 9.999 8929 | 40 |    |
|    | 30 | 8.347 3517 | 9450  | 8.347 4592 | 9455  | 1.652 5408 | 9.999 8925 | 30 |    |
|    | 40 | 8.348 2967 | 9429  | 8.348 4047 | 9434  | 1.651 5953 | 9.999 8920 | 20 |    |
|    | 50 | 8.349 2396 | 9409  | 8.349 3481 | 9414  | 1.650 6519 | 9.999 8915 | 10 |    |
| 17 | 0  | 8.350 1805 | 9389  | 8.350 2895 | 9393  | 1.649 7105 | 9.999 8911 | 0  | 43 |
|    | 10 | 8.351 1194 | 9368  | 8.351 2288 | 9373  | 1.648 7712 | 9.999 8906 | 50 |    |
|    | 20 | 8.352 0562 | 9348  | 8.352 1661 | 9353  | 1.647 8339 | 9.999 8901 | 40 |    |
|    | 30 | 8.352 9910 | 9328  | 8.353 1014 | 9333  | 1.646 8986 | 9.999 8896 | 30 |    |
|    | 40 | 8.353 9238 | 9308  | 8.354 0347 | 9313  | 1.645 9653 | 9.999 8892 | 20 |    |
|    | 50 | 8.354 8546 | 9289  | 8.354 9660 | 9293  | 1.645 0340 | 9.999 8887 | 10 |    |
| 18 | 0  | 8.355 7835 | 9268  | 8.355 8953 | 9273  | 1.644 1047 | 9.999 8882 | 0  | 42 |
|    | 10 | 8.356 7103 | 9248  | 8.356 8226 | 9253  | 1.643 1774 | 9.999 8877 | 50 |    |
|    | 20 | 8.357 6351 | 9229  | 8.357 7479 | 9234  | 1.642 2521 | 9.999 8872 | 40 |    |
|    | 30 | 8.358 5580 | 9210  | 8.358 6713 | 9214  | 1.641 3287 | 9.999 8868 | 30 |    |
|    | 40 | 8.359 4790 | 9189  | 8.359 5927 | 9194  | 1.640 4073 | 9.999 8863 | 20 |    |
|    | 50 | 8.360 3979 | 9171  | 8.360 5121 | 9176  | 1.639 4879 | 9.999 8858 | 10 |    |
| 19 | 0  | 8.361 3150 | 9151  | 8.361 4297 | 9156  | 1.638 5703 | 9.999 8853 | 0  | 41 |
|    | 10 | 8.362 2301 | 9132  | 8.362 3453 | 9136  | 1.637 6547 | 9.999 8848 | 50 |    |
|    | 20 | 8.363 1433 | 9112  | 8.363 2589 | 9118  | 1.636 7411 | 9.999 8843 | 40 |    |
|    | 30 | 8.364 0545 | 9094  | 8.364 1707 | 9098  | 1.635 8293 | 9.999 8839 | 30 |    |
|    | 40 | 8.364 9639 | 9074  | 8.365 0805 | 9080  | 1.634 9195 | 9.999 8834 | 20 |    |
|    | 50 | 8.365 8713 | 9056  | 8.365 9885 | 9060  | 1.634 0115 | 9.999 8829 | 10 |    |
| 20 | 0  | 8.366 7769 | 9036  | 8.366 8945 | 9040  | 1.633 1055 | 9.999 8824 | 0  | 40 |
|    | "  | Cos        | d.    | Cotg       | d.    | Tang       | Sin        | "  |    |



| i  | n  | Sta        | d.   | Tang       | d. e. | Colg       | Con        | d. | n  | i  |
|----|----|------------|------|------------|-------|------------|------------|----|----|----|
| 20 | 0  | 8.366 7769 | 9037 | 8.366 8945 | 9032  | 1.613 1054 | 8.369 8824 | 5  | 0  | 40 |
|    | 10 | 8.367 6806 | 9018 | 8.367 7982 | 9023  | 1.612 1041 | 8.369 8819 | 5  | 10 |    |
|    | 20 | 8.368 5824 | 8999 | 8.368 7010 | 9004  | 1.611 1029 | 8.369 8814 | 5  | 20 |    |
|    | 30 | 8.369 4823 | 8981 | 8.369 6014 | 8985  | 1.610 1016 | 8.369 8809 | 5  | 30 |    |
|    | 40 | 8.370 3804 | 8962 | 8.370 4999 | 8968  | 1.609 1004 | 8.369 8804 | 5  | 40 |    |
| 21 | 0  | 8.371 2766 | 8944 | 8.371 3962 | 8948  | 1.608 9931 | 8.369 8799 | 5  | 0  | 39 |
|    | 10 | 8.372 1710 | 8925 | 8.372 2915 | 8930  | 1.607 9815 | 8.369 8794 | 5  | 10 |    |
|    | 20 | 8.373 0635 | 8907 | 8.373 1845 | 8912  | 1.606 9695 | 8.369 8789 | 5  | 20 |    |
|    | 30 | 8.373 9542 | 8888 | 8.374 0752 | 8894  | 1.605 9574 | 8.369 8784 | 5  | 30 |    |
|    | 40 | 8.374 8430 | 8871 | 8.374 9651 | 8876  | 1.604 9452 | 8.369 8779 | 5  | 40 |    |
| 22 | 0  | 8.375 7301 | 8852 | 8.375 8527 | 8857  | 1.603 9331 | 8.369 8774 | 5  | 0  | 38 |
|    | 10 | 8.376 6153 | 8835 | 8.376 7381 | 8840  | 1.602 9209 | 8.369 8769 | 5  | 10 |    |
|    | 20 | 8.377 4988 | 8816 | 8.377 6221 | 8822  | 1.601 9087 | 8.369 8764 | 5  | 20 |    |
|    | 30 | 8.378 3804 | 8799 | 8.378 5045 | 8804  | 1.600 8965 | 8.369 8759 | 5  | 30 |    |
|    | 40 | 8.379 2601 | 8781 | 8.379 3849 | 8786  | 1.599 8843 | 8.369 8754 | 5  | 40 |    |
| 23 | 0  | 8.380 1384 | 8762 | 8.380 2634 | 8767  | 1.598 8721 | 8.369 8749 | 5  | 0  | 37 |
|    | 10 | 8.381 0147 | 8744 | 8.381 1401 | 8749  | 1.597 8599 | 8.369 8744 | 5  | 10 |    |
|    | 20 | 8.381 8892 | 8725 | 8.382 0151 | 8730  | 1.596 8477 | 8.369 8739 | 5  | 20 |    |
|    | 30 | 8.382 7620 | 8707 | 8.382 8880 | 8712  | 1.595 8355 | 8.369 8734 | 5  | 30 |    |
|    | 40 | 8.383 6330 | 8688 | 8.383 7590 | 8693  | 1.594 8233 | 8.369 8729 | 5  | 40 |    |
| 24 | 0  | 8.384 5021 | 8670 | 8.384 6289 | 8675  | 1.593 8111 | 8.369 8724 | 5  | 0  | 36 |
|    | 10 | 8.385 3699 | 8651 | 8.385 4966 | 8656  | 1.592 7989 | 8.369 8719 | 5  | 10 |    |
|    | 20 | 8.386 2357 | 8632 | 8.386 3624 | 8637  | 1.591 7867 | 8.369 8714 | 5  | 20 |    |
|    | 30 | 8.387 0998 | 8614 | 8.387 2269 | 8619  | 1.590 7745 | 8.369 8709 | 5  | 30 |    |
|    | 40 | 8.387 9622 | 8595 | 8.388 0891 | 8600  | 1.589 7623 | 8.369 8704 | 5  | 40 |    |
| 25 | 0  | 8.388 8229 | 8576 | 8.388 9490 | 8581  | 1.588 7501 | 8.369 8699 | 5  | 0  | 35 |
|    | 10 | 8.389 6818 | 8558 | 8.389 8084 | 8563  | 1.587 7379 | 8.369 8694 | 5  | 10 |    |
|    | 20 | 8.390 5391 | 8539 | 8.390 6654 | 8544  | 1.586 7257 | 8.369 8689 | 5  | 20 |    |
|    | 30 | 8.391 3947 | 8520 | 8.391 5204 | 8525  | 1.585 7135 | 8.369 8684 | 5  | 30 |    |
|    | 40 | 8.392 2486 | 8502 | 8.392 3745 | 8507  | 1.584 7013 | 8.369 8679 | 5  | 40 |    |
| 26 | 0  | 8.393 1008 | 8483 | 8.393 2266 | 8488  | 1.583 6891 | 8.369 8674 | 5  | 0  | 34 |
|    | 10 | 8.393 9513 | 8464 | 8.394 0770 | 8469  | 1.582 6769 | 8.369 8669 | 5  | 10 |    |
|    | 20 | 8.394 8001 | 8445 | 8.394 9269 | 8450  | 1.581 6647 | 8.369 8664 | 5  | 20 |    |
|    | 30 | 8.395 6475 | 8426 | 8.395 7732 | 8431  | 1.580 6525 | 8.369 8659 | 5  | 30 |    |
|    | 40 | 8.396 4930 | 8407 | 8.396 6187 | 8412  | 1.579 6403 | 8.369 8654 | 5  | 40 |    |
| 27 | 0  | 8.397 3370 | 8388 | 8.397 4627 | 8393  | 1.578 6281 | 8.369 8649 | 5  | 0  | 33 |
|    | 10 | 8.398 1791 | 8369 | 8.398 3048 | 8374  | 1.577 6159 | 8.369 8644 | 5  | 10 |    |
|    | 20 | 8.399 0209 | 8350 | 8.399 1464 | 8355  | 1.576 6037 | 8.369 8639 | 5  | 20 |    |
|    | 30 | 8.399 8600 | 8331 | 8.399 9855 | 8336  | 1.575 5915 | 8.369 8634 | 5  | 30 |    |
|    | 40 | 8.400 6964 | 8312 | 8.400 8219 | 8317  | 1.574 5793 | 8.369 8629 | 5  | 40 |    |
| 28 | 0  | 8.401 5313 | 8293 | 8.401 6568 | 8298  | 1.573 5671 | 8.369 8624 | 5  | 0  | 32 |
|    | 10 | 8.402 3664 | 8274 | 8.402 4919 | 8279  | 1.572 5549 | 8.369 8619 | 5  | 10 |    |
|    | 20 | 8.403 1999 | 8255 | 8.403 3254 | 8260  | 1.571 5427 | 8.369 8614 | 5  | 20 |    |
|    | 30 | 8.404 0311 | 8236 | 8.404 1566 | 8241  | 1.570 5305 | 8.369 8609 | 5  | 30 |    |
|    | 40 | 8.404 8604 | 8217 | 8.404 9821 | 8222  | 1.569 5183 | 8.369 8604 | 5  | 40 |    |
| 29 | 0  | 8.405 6873 | 8198 | 8.405 8128 | 8203  | 1.568 5061 | 8.369 8599 | 5  | 0  | 31 |
|    | 10 | 8.406 5115 | 8179 | 8.406 6370 | 8184  | 1.567 4939 | 8.369 8594 | 5  | 10 |    |
|    | 20 | 8.407 3342 | 8160 | 8.407 4597 | 8165  | 1.566 4817 | 8.369 8589 | 5  | 20 |    |
|    | 30 | 8.408 1544 | 8141 | 8.408 2799 | 8146  | 1.565 4695 | 8.369 8584 | 5  | 30 |    |
|    | 40 | 8.408 9719 | 8122 | 8.409 0974 | 8127  | 1.564 4573 | 8.369 8579 | 5  | 40 |    |
| 30 | 0  | 8.409 7860 | 8103 | 8.409 9115 | 8108  | 1.563 4451 | 8.369 8574 | 5  | 0  | 30 |
|    | 10 | 8.410 5981 | 8084 | 8.410 7236 | 8089  | 1.562 4329 | 8.369 8569 | 5  | 10 |    |
|    | 20 | 8.411 4081 | 8065 | 8.411 5336 | 8070  | 1.561 4207 | 8.369 8564 | 5  | 20 |    |
|    | 30 | 8.412 2157 | 8046 | 8.412 3412 | 8051  | 1.560 4085 | 8.369 8559 | 5  | 30 |    |
|    | 40 | 8.413 0206 | 8027 | 8.413 1461 | 8032  | 1.559 3963 | 8.369 8554 | 5  | 40 |    |



|    | "  | Sin        | d.   | Tang       | d. c. | Cotg       | Cos        | d. | "  |    |
|----|----|------------|------|------------|-------|------------|------------|----|----|----|
| 30 | 0  | 8.417 9190 | 8033 | 8.418 0679 | 8038  | 1.581 9321 | 9.999 8512 | 6  | 0  | 30 |
|    | 10 | 8.418 7223 | 8019 | 8.418 8717 | 8024  | 1.581 1283 | 9.999 8506 | 6  | 50 |    |
|    | 20 | 8.419 5242 | 8003 | 8.419 6741 | 8009  | 1.580 3259 | 9.999 8500 | 6  | 40 |    |
|    | 30 | 8.420 3245 | 7989 | 8.420 4750 | 7995  | 1.579 5250 | 9.999 8495 | 5  | 30 |    |
|    | 40 | 8.421 1234 | 7974 | 8.421 2745 | 7980  | 1.578 7255 | 9.999 8489 | 5  | 20 |    |
|    | 50 | 8.421 9208 | 7960 | 8.422 0725 | 7965  | 1.577 9275 | 9.999 8484 | 5  | 10 |    |
| 31 | 0  | 8.422 7168 | 7945 | 8.422 8690 | 7950  | 1.577 1310 | 9.999 8478 | 5  | 0  | 29 |
|    | 10 | 8.423 5113 | 7930 | 8.423 6640 | 7936  | 1.576 3360 | 9.999 8473 | 6  | 50 |    |
|    | 20 | 8.424 3043 | 7916 | 8.424 4576 | 7922  | 1.575 5424 | 9.999 8467 | 6  | 40 |    |
|    | 30 | 8.425 0959 | 7902 | 8.425 2498 | 7907  | 1.574 7502 | 9.999 8461 | 5  | 30 |    |
|    | 40 | 8.425 8861 | 7887 | 8.426 0405 | 7893  | 1.573 9595 | 9.999 8456 | 5  | 20 |    |
|    | 50 | 8.426 6748 | 7873 | 8.426 8298 | 7878  | 1.573 1702 | 9.999 8450 | 5  | 10 |    |
| 32 | 0  | 8.427 4621 | 7859 | 8.427 6176 | 7865  | 1.572 3824 | 9.999 8445 | 6  | 0  | 28 |
|    | 10 | 8.428 2480 | 7844 | 8.428 4041 | 7850  | 1.571 5959 | 9.999 8439 | 6  | 50 |    |
|    | 20 | 8.429 0324 | 7830 | 8.429 1891 | 7836  | 1.570 8109 | 9.999 8433 | 5  | 40 |    |
|    | 30 | 8.429 8154 | 7817 | 8.429 9727 | 7822  | 1.570 0273 | 9.999 8428 | 6  | 30 |    |
|    | 40 | 8.430 5971 | 7802 | 8.430 7549 | 7807  | 1.569 2451 | 9.999 8422 | 6  | 20 |    |
|    | 50 | 8.431 3773 | 7788 | 8.431 5356 | 7794  | 1.568 4644 | 9.999 8416 | 5  | 10 |    |
| 33 | 0  | 8.432 1561 | 7774 | 8.432 3150 | 7780  | 1.567 6850 | 9.999 8411 | 6  | 0  | 27 |
|    | 10 | 8.432 9335 | 7760 | 8.433 0930 | 7766  | 1.566 9070 | 9.999 8405 | 6  | 50 |    |
|    | 20 | 8.433 7095 | 7747 | 8.433 8696 | 7752  | 1.566 1304 | 9.999 8399 | 6  | 40 |    |
|    | 30 | 8.434 4842 | 7732 | 8.434 6448 | 7739  | 1.565 3552 | 9.999 8393 | 5  | 30 |    |
|    | 40 | 8.435 2574 | 7719 | 8.435 4187 | 7724  | 1.564 5813 | 9.999 8388 | 6  | 20 |    |
|    | 50 | 8.436 0293 | 7706 | 8.436 1911 | 7711  | 1.563 8089 | 9.999 8382 | 6  | 10 |    |
| 34 | 0  | 8.436 7999 | 7691 | 8.436 9622 | 7698  | 1.563 0378 | 9.999 8376 | 6  | 0  | 26 |
|    | 10 | 8.437 5690 | 7678 | 8.437 7320 | 7683  | 1.562 2680 | 9.999 8370 | 5  | 50 |    |
|    | 20 | 8.438 3368 | 7664 | 8.438 5003 | 7670  | 1.561 4997 | 9.999 8365 | 6  | 40 |    |
|    | 30 | 8.439 1032 | 7651 | 8.439 2673 | 7657  | 1.560 7327 | 9.999 8359 | 6  | 30 |    |
|    | 40 | 8.439 8683 | 7638 | 8.440 0330 | 7643  | 1.559 9670 | 9.999 8353 | 6  | 20 |    |
|    | 50 | 8.440 6321 | 7623 | 8.440 7973 | 7630  | 1.559 2027 | 9.999 8347 | 5  | 10 |    |
| 35 | 0  | 8.441 3944 | 7611 | 8.441 5603 | 7616  | 1.558 4397 | 9.999 8342 | 6  | 0  | 25 |
|    | 10 | 8.442 1555 | 7597 | 8.442 3219 | 7603  | 1.557 6781 | 9.999 8336 | 6  | 50 |    |
|    | 20 | 8.442 9152 | 7584 | 8.443 0822 | 7590  | 1.556 9178 | 9.999 8330 | 6  | 40 |    |
|    | 30 | 8.443 6736 | 7571 | 8.443 8412 | 7577  | 1.556 1588 | 9.999 8324 | 6  | 30 |    |
|    | 40 | 8.444 4307 | 7558 | 8.444 5989 | 7563  | 1.555 4011 | 9.999 8318 | 6  | 20 |    |
|    | 50 | 8.445 1865 | 7544 | 8.445 3552 | 7551  | 1.554 6448 | 9.999 8312 | 6  | 10 |    |
| 36 | 0  | 8.445 9409 | 7531 | 8.446 1103 | 7537  | 1.553 8897 | 9.999 8306 | 5  | 0  | 24 |
|    | 10 | 8.446 6940 | 7519 | 8.446 8640 | 7524  | 1.553 1360 | 9.999 8301 | 6  | 50 |    |
|    | 20 | 8.447 4459 | 7505 | 8.447 6164 | 7511  | 1.552 3836 | 9.999 8295 | 6  | 40 |    |
|    | 30 | 8.448 1964 | 7492 | 8.448 3675 | 7498  | 1.551 6325 | 9.999 8289 | 6  | 30 |    |
|    | 40 | 8.448 9456 | 7480 | 8.449 1173 | 7486  | 1.550 8827 | 9.999 8283 | 6  | 20 |    |
|    | 50 | 8.449 6936 | 7466 | 8.449 8659 | 7472  | 1.550 1341 | 9.999 8277 | 6  | 10 |    |
| 37 | 0  | 8.450 4402 | 7454 | 8.450 6131 | 7460  | 1.549 3869 | 9.999 8271 | 6  | 0  | 23 |
|    | 10 | 8.451 1856 | 7441 | 8.451 3591 | 7447  | 1.548 6409 | 9.999 8265 | 6  | 50 |    |
|    | 20 | 8.451 9297 | 7428 | 8.452 1038 | 7434  | 1.547 8962 | 9.999 8259 | 6  | 40 |    |
|    | 30 | 8.452 6725 | 7416 | 8.452 8472 | 7421  | 1.547 1528 | 9.999 8253 | 6  | 30 |    |
|    | 40 | 8.453 4141 | 7402 | 8.453 5893 | 7409  | 1.546 4107 | 9.999 8247 | 6  | 20 |    |
|    | 50 | 8.454 1543 | 7391 | 8.454 3302 | 7397  | 1.545 6698 | 9.999 8241 | 6  | 10 |    |
| 38 | 0  | 8.454 8934 | 7377 | 8.455 0699 | 7383  | 1.544 9301 | 9.999 8235 | 6  | 0  | 22 |
|    | 10 | 8.455 6311 | 7366 | 8.455 8082 | 7371  | 1.544 1918 | 9.999 8229 | 6  | 50 |    |
|    | 20 | 8.456 3677 | 7352 | 8.456 5453 | 7359  | 1.543 4547 | 9.999 8223 | 6  | 40 |    |
|    | 30 | 8.457 1029 | 7340 | 8.457 2812 | 7346  | 1.542 7188 | 9.999 8217 | 6  | 30 |    |
|    | 40 | 8.457 8369 | 7328 | 8.458 0158 | 7334  | 1.541 9842 | 9.999 8211 | 6  | 20 |    |
|    | 50 | 8.458 5697 | 7316 | 8.458 7492 | 7322  | 1.541 2508 | 9.999 8205 | 6  | 10 |    |
| 39 | 0  | 8.459 3013 | 7303 | 8.459 4814 | 7309  | 1.540 5186 | 9.999 8199 | 6  | 0  | 21 |
|    | 10 | 8.460 0316 | 7291 | 8.460 2123 | 7297  | 1.539 7877 | 9.999 8193 | 6  | 50 |    |
|    | 20 | 8.460 7607 | 7279 | 8.460 9420 | 7285  | 1.539 0580 | 9.999 8187 | 6  | 40 |    |
|    | 30 | 8.461 4886 | 7266 | 8.461 6705 | 7273  | 1.538 3295 | 9.999 8181 | 6  | 30 |    |
|    | 40 | 8.462 2152 | 7254 | 8.462 3978 | 7260  | 1.537 6022 | 9.999 8175 | 7  | 20 |    |
|    | 50 | 8.462 9406 | 7243 | 8.463 1238 | 7248  | 1.536 8762 | 9.999 8168 | 6  | 10 |    |
| 40 | 0  | 8.463 6649 |      | 8.463 8486 |       | 1.536 1514 | 9.999 8162 | 6  | 0  | 20 |
|    | "  | Cos        | d.   | Cotg       | d.    | Tang       | Sin        | d. | "  |    |



|    |    | Sin        | d.   | Tang       | d. c. | Cotg       | Cos        | d. |    |    |
|----|----|------------|------|------------|-------|------------|------------|----|----|----|
| 40 | 0  | 8.463 6649 | 7230 | 8.463 8486 | 7237  | 1.536 1514 | 9.999 8162 | 6  | 0  | 20 |
|    | 10 | 8.464 3879 | 7218 | 8.464 5723 | 7224  | 1.535 4277 | 9.999 8156 | 6  | 50 |    |
|    | 20 | 8.465 1097 | 7206 | 8.465 2947 | 7212  | 1.534 7053 | 9.999 8150 | 6  | 40 |    |
|    | 30 | 8.465 8303 | 7194 | 8.466 0159 | 7201  | 1.533 9841 | 9.999 8144 | 6  | 30 |    |
|    | 40 | 8.466 5497 | 7183 | 8.466 7360 | 7188  | 1.533 2640 | 9.999 8138 | 6  | 20 |    |
|    | 50 | 8.467 2680 | 7170 | 8.467 4548 | 7177  | 1.532 5452 | 9.999 8132 | 7  | 10 |    |
| 41 | 0  | 8.467 9850 | 7159 | 8.468 1725 | 7165  | 1.531 8275 | 9.999 8125 | 6  | 0  | 19 |
|    | 10 | 8.468 7009 | 7147 | 8.468 8890 | 7153  | 1.531 1110 | 9.999 8119 | 6  | 50 |    |
|    | 20 | 8.469 4156 | 7135 | 8.469 6043 | 7141  | 1.530 3957 | 9.999 8113 | 6  | 40 |    |
|    | 30 | 8.470 1291 | 7123 | 8.470 3184 | 7129  | 1.529 6816 | 9.999 8107 | 6  | 30 |    |
|    | 40 | 8.470 8414 | 7112 | 8.471 0313 | 7118  | 1.528 9687 | 9.999 8101 | 7  | 20 |    |
|    | 50 | 8.471 5526 | 7100 | 8.471 7431 | 7107  | 1.528 2569 | 9.999 8094 | 6  | 10 |    |
| 42 | 0  | 8.472 2626 | 7088 | 8.472 4538 | 7094  | 1.527 5462 | 9.999 8088 | 6  | 0  | 18 |
|    | 10 | 8.472 9714 | 7077 | 8.473 1632 | 7083  | 1.526 8368 | 9.999 8082 | 6  | 50 |    |
|    | 20 | 8.473 6791 | 7065 | 8.473 8715 | 7072  | 1.526 1285 | 9.999 8076 | 6  | 40 |    |
|    | 30 | 8.474 3856 | 7054 | 8.474 5787 | 7060  | 1.525 4213 | 9.999 8069 | 7  | 30 |    |
|    | 40 | 8.475 0910 | 7043 | 8.475 2847 | 7049  | 1.524 7153 | 9.999 8063 | 6  | 20 |    |
|    | 50 | 8.475 7953 | 7031 | 8.475 9896 | 7037  | 1.524 0104 | 9.999 8057 | 7  | 10 |    |
| 43 | 0  | 8.476 4984 | 7019 | 8.476 6933 | 7026  | 1.523 3067 | 9.999 8050 | 6  | 0  | 17 |
|    | 10 | 8.477 2003 | 7009 | 8.477 3959 | 7015  | 1.522 6041 | 9.999 8044 | 6  | 50 |    |
|    | 20 | 8.477 9012 | 6997 | 8.478 0974 | 7003  | 1.521 9026 | 9.999 8038 | 7  | 40 |    |
|    | 30 | 8.478 6009 | 6985 | 8.478 7977 | 6992  | 1.521 2023 | 9.999 8031 | 6  | 30 |    |
|    | 40 | 8.479 2994 | 6975 | 8.479 4969 | 6981  | 1.520 5031 | 9.999 8025 | 6  | 20 |    |
|    | 50 | 8.479 9969 | 6963 | 8.480 1950 | 6970  | 1.519 8050 | 9.999 8019 | 7  | 10 |    |
| 44 | 0  | 8.480 6932 | 6952 | 8.480 8920 | 6958  | 1.519 1080 | 9.999 8012 | 6  | 0  | 16 |
|    | 10 | 8.481 3884 | 6941 | 8.481 5878 | 6948  | 1.518 4122 | 9.999 8006 | 6  | 50 |    |
|    | 20 | 8.482 0825 | 6930 | 8.482 2826 | 6936  | 1.517 7174 | 9.999 8000 | 7  | 40 |    |
|    | 30 | 8.482 7755 | 6919 | 8.482 9762 | 6925  | 1.517 0238 | 9.999 7993 | 6  | 30 |    |
|    | 40 | 8.483 4674 | 6908 | 8.483 6687 | 6915  | 1.516 3313 | 9.999 7987 | 7  | 20 |    |
|    | 50 | 8.484 1582 | 6897 | 8.484 3602 | 6903  | 1.515 6398 | 9.999 7980 | 6  | 10 |    |
| 45 | 0  | 8.484 8479 | 6886 | 8.485 0505 | 6892  | 1.514 9495 | 9.999 7974 | 6  | 0  | 15 |
|    | 10 | 8.485 5365 | 6875 | 8.485 7397 | 6882  | 1.514 2603 | 9.999 7968 | 7  | 50 |    |
|    | 20 | 8.486 2240 | 6864 | 8.486 4279 | 6870  | 1.513 5721 | 9.999 7961 | 6  | 40 |    |
|    | 30 | 8.486 9104 | 6853 | 8.487 1149 | 6860  | 1.512 8851 | 9.999 7955 | 7  | 30 |    |
|    | 40 | 8.487 5957 | 6843 | 8.487 8009 | 6849  | 1.512 1991 | 9.999 7948 | 6  | 20 |    |
|    | 50 | 8.488 2800 | 6832 | 8.488 4858 | 6838  | 1.511 5142 | 9.999 7942 | 7  | 10 |    |
| 46 | 0  | 8.488 9632 | 6821 | 8.489 1696 | 6828  | 1.510 8304 | 9.999 7935 | 6  | 0  | 14 |
|    | 10 | 8.489 6453 | 6810 | 8.489 8524 | 6817  | 1.510 1476 | 9.999 7929 | 7  | 50 |    |
|    | 20 | 8.490 3263 | 6800 | 8.490 5341 | 6806  | 1.509 4659 | 9.999 7922 | 6  | 40 |    |
|    | 30 | 8.491 0063 | 6789 | 8.491 2147 | 6795  | 1.508 7853 | 9.999 7916 | 7  | 30 |    |
|    | 40 | 8.491 6852 | 6778 | 8.491 8942 | 6785  | 1.508 1058 | 9.999 7909 | 6  | 20 |    |
|    | 50 | 8.492 3630 | 6768 | 8.492 5727 | 6775  | 1.507 4273 | 9.999 7903 | 7  | 10 |    |
| 47 | 0  | 8.493 0398 | 6757 | 8.493 2502 | 6764  | 1.506 7498 | 9.999 7896 | 6  | 0  | 13 |
|    | 10 | 8.493 7155 | 6747 | 8.493 9266 | 6753  | 1.506 0734 | 9.999 7889 | 7  | 50 |    |
|    | 20 | 8.494 3902 | 6736 | 8.494 6019 | 6743  | 1.505 3981 | 9.999 7883 | 6  | 40 |    |
|    | 30 | 8.495 0638 | 6726 | 8.495 2762 | 6732  | 1.504 7238 | 9.999 7876 | 7  | 30 |    |
|    | 40 | 8.495 7364 | 6715 | 8.495 9494 | 6722  | 1.504 0506 | 9.999 7870 | 6  | 20 |    |
|    | 50 | 8.496 4079 | 6705 | 8.496 6216 | 6712  | 1.503 3784 | 9.999 7863 | 7  | 10 |    |
| 48 | 0  | 8.497 0784 | 6695 | 8.497 2928 | 6701  | 1.502 7072 | 9.999 7856 | 6  | 0  | 12 |
|    | 10 | 8.497 7479 | 6684 | 8.497 9629 | 6691  | 1.502 0371 | 9.999 7850 | 7  | 50 |    |
|    | 20 | 8.498 4163 | 6675 | 8.498 6320 | 6681  | 1.501 3680 | 9.999 7843 | 6  | 40 |    |
|    | 30 | 8.499 0838 | 6663 | 8.499 3001 | 6670  | 1.500 6999 | 9.999 7837 | 7  | 30 |    |
|    | 40 | 8.499 7501 | 6654 | 8.499 9671 | 6661  | 1.500 0329 | 9.999 7830 | 6  | 20 |    |
|    | 50 | 8.500 4155 | 6643 | 8.500 6332 | 6650  | 1.499 3668 | 9.999 7823 | 7  | 10 |    |
| 49 | 0  | 8.501 0798 | 6634 | 8.501 2982 | 6640  | 1.498 7018 | 9.999 7817 | 6  | 0  | 11 |
|    | 10 | 8.501 7432 | 6623 | 8.501 9622 | 6630  | 1.498 0378 | 9.999 7810 | 7  | 50 |    |
|    | 20 | 8.502 4055 | 6613 | 8.502 6252 | 6619  | 1.497 3748 | 9.999 7803 | 6  | 40 |    |
|    | 30 | 8.503 0668 | 6603 | 8.503 2871 | 6610  | 1.496 7129 | 9.999 7797 | 7  | 30 |    |
|    | 40 | 8.503 7271 | 6593 | 8.503 9481 | 6600  | 1.496 0519 | 9.999 7790 | 6  | 20 |    |
|    | 50 | 8.504 3864 | 6583 | 8.504 6081 | 6590  | 1.495 3919 | 9.999 7783 | 7  | 10 |    |
| 50 | 0  | 8.505 0447 |      | 8.505 2671 |       | 1.494 7329 | 9.999 7776 | 7  | 0  | 10 |
|    |    | Cos        | d.   | Cotg       | d.    | Tang       | Sin        | d. |    |    |







|    |    | Sfn        | d.   | Tang       | d. c. | Cotg       | Cos        | d. | "  |    |
|----|----|------------|------|------------|-------|------------|------------|----|----|----|
| 0  | o  | 8.542 8192 | 6025 | 8.543 0838 | 6033  | 1.456 9162 | 9.999 7354 | 8  | o  | 60 |
|    | 10 | 8.543 4217 | 6017 | 8.543 6871 | 6024  | 1.456 3129 | 9.999 7346 | 7  | 50 |    |
|    | 20 | 8.544 0234 | 6008 | 8.544 2895 | 6016  | 1.455 7105 | 9.999 7339 | 7  | 40 |    |
|    | 30 | 8.544 6242 | 6001 | 8.544 8911 | 6007  | 1.455 1089 | 9.999 7331 | 7  | 30 |    |
|    | 40 | 8.545 2243 | 5991 | 8.545 4918 | 6000  | 1.454 5082 | 9.999 7324 | 7  | 20 |    |
|    | 50 | 8.545 8234 | 5984 | 8.546 0918 | 5991  | 1.453 9082 | 9.999 7317 | 8  | 10 |    |
| 1  | o  | 8.546 4218 | 5976 | 8.546 6909 | 5983  | 1.453 3091 | 9.999 7309 | 7  | o  | 59 |
|    | 10 | 8.547 0194 | 5967 | 8.547 2892 | 5974  | 1.452 7108 | 9.999 7302 | 8  | 50 |    |
|    | 20 | 8.547 6161 | 5959 | 8.547 8866 | 5967  | 1.452 1134 | 9.999 7294 | 7  | 40 |    |
|    | 30 | 8.548 2120 | 5951 | 8.548 4833 | 5958  | 1.451 5167 | 9.999 7287 | 7  | 30 |    |
|    | 40 | 8.548 8071 | 5942 | 8.549 0791 | 5950  | 1.450 9209 | 9.999 7280 | 7  | 20 |    |
|    | 50 | 8.549 4013 | 5935 | 8.549 6741 | 5942  | 1.450 3259 | 9.999 7272 | 7  | 10 |    |
| 2  | o  | 8.549 9948 | 5926 | 8.550 2683 | 5934  | 1.449 7317 | 9.999 7265 | 8  | o  | 58 |
|    | 10 | 8.550 5874 | 5919 | 8.550 8617 | 5926  | 1.449 1383 | 9.999 7257 | 7  | 50 |    |
|    | 20 | 8.551 1793 | 5910 | 8.551 4543 | 5918  | 1.448 5457 | 9.999 7250 | 8  | 40 |    |
|    | 30 | 8.551 7703 | 5902 | 8.552 0461 | 5910  | 1.447 9539 | 9.999 7242 | 7  | 30 |    |
|    | 40 | 8.552 3605 | 5894 | 8.552 6371 | 5901  | 1.447 3629 | 9.999 7235 | 7  | 20 |    |
|    | 50 | 8.552 9499 | 5887 | 8.553 2272 | 5894  | 1.446 7728 | 9.999 7227 | 7  | 10 |    |
| 3  | o  | 8.553 5386 | 5878 | 8.553 8166 | 5886  | 1.446 1834 | 9.999 7220 | 8  | o  | 57 |
|    | 10 | 8.554 1264 | 5870 | 8.554 4052 | 5878  | 1.445 5948 | 9.999 7212 | 8  | 50 |    |
|    | 20 | 8.554 7134 | 5863 | 8.554 9930 | 5870  | 1.445 0070 | 9.999 7204 | 7  | 40 |    |
|    | 30 | 8.555 2997 | 5854 | 8.555 5800 | 5862  | 1.444 4200 | 9.999 7197 | 8  | 30 |    |
|    | 40 | 8.555 8851 | 5847 | 8.556 1662 | 5854  | 1.443 8338 | 9.999 7189 | 7  | 20 |    |
|    | 50 | 8.556 4698 | 5838 | 8.556 7516 | 5846  | 1.443 2484 | 9.999 7182 | 8  | 10 |    |
| 4  | o  | 8.557 0536 | 5831 | 8.557 3362 | 5839  | 1.442 6638 | 9.999 7174 | 7  | o  | 56 |
|    | 10 | 8.557 6367 | 5823 | 8.557 9201 | 5830  | 1.442 0799 | 9.999 7167 | 8  | 50 |    |
|    | 20 | 8.558 2190 | 5815 | 8.558 5031 | 5823  | 1.441 4969 | 9.999 7159 | 8  | 40 |    |
|    | 30 | 8.558 8005 | 5808 | 8.559 0854 | 5815  | 1.440 9146 | 9.999 7151 | 7  | 30 |    |
|    | 40 | 8.559 3813 | 5799 | 8.559 6669 | 5807  | 1.440 3331 | 9.999 7144 | 8  | 20 |    |
|    | 50 | 8.559 9612 | 5792 | 8.560 2476 | 5800  | 1.439 7524 | 9.999 7136 | 8  | 10 |    |
| 5  | o  | 8.560 5404 | 5784 | 8.560 8276 | 5792  | 1.439 1724 | 9.999 7128 | 7  | o  | 55 |
|    | 10 | 8.561 1188 | 5777 | 8.561 4068 | 5784  | 1.438 5932 | 9.999 7121 | 8  | 50 |    |
|    | 20 | 8.561 6965 | 5769 | 8.561 9852 | 5776  | 1.438 0148 | 9.999 7113 | 8  | 40 |    |
|    | 30 | 8.562 2734 | 5761 | 8.562 5628 | 5769  | 1.437 4372 | 9.999 7105 | 7  | 30 |    |
|    | 40 | 8.562 8495 | 5753 | 8.563 1397 | 5761  | 1.436 8603 | 9.999 7098 | 8  | 20 |    |
|    | 50 | 8.563 4248 | 5746 | 8.563 7158 | 5754  | 1.436 2842 | 9.999 7090 | 8  | 10 |    |
| 6  | o  | 8.563 9994 | 5738 | 8.564 2912 | 5746  | 1.435 7088 | 9.999 7082 | 7  | o  | 54 |
|    | 10 | 8.564 5732 | 5731 | 8.564 8658 | 5738  | 1.435 1342 | 9.999 7075 | 8  | 50 |    |
|    | 20 | 8.565 1463 | 5723 | 8.565 4396 | 5731  | 1.434 5604 | 9.999 7067 | 8  | 40 |    |
|    | 30 | 8.565 7186 | 5716 | 8.566 0127 | 5724  | 1.433 9873 | 9.999 7059 | 8  | 30 |    |
|    | 40 | 8.566 2902 | 5708 | 8.566 5851 | 5715  | 1.433 4149 | 9.999 7051 | 7  | 20 |    |
|    | 50 | 8.566 8610 | 5700 | 8.567 1566 | 5709  | 1.432 8434 | 9.999 7044 | 8  | 10 |    |
| 7  | o  | 8.567 4310 | 5694 | 8.567 7275 | 5701  | 1.432 2725 | 9.999 7036 | 8  | o  | 53 |
|    | 10 | 8.568 0004 | 5685 | 8.568 2976 | 5693  | 1.431 7024 | 9.999 7028 | 8  | 50 |    |
|    | 20 | 8.568 5689 | 5678 | 8.568 8669 | 5686  | 1.431 1331 | 9.999 7020 | 8  | 40 |    |
|    | 30 | 8.569 1367 | 5671 | 8.569 4355 | 5679  | 1.430 5645 | 9.999 7012 | 7  | 30 |    |
|    | 40 | 8.569 7038 | 5663 | 8.570 0034 | 5671  | 1.429 9966 | 9.999 7005 | 8  | 20 |    |
|    | 50 | 8.570 2701 | 5656 | 8.570 5705 | 5663  | 1.429 4295 | 9.999 6997 | 8  | 10 |    |
| 8  | o  | 8.570 8357 | 5649 | 8.571 1368 | 5657  | 1.428 8632 | 9.999 6989 | 8  | o  | 52 |
|    | 10 | 8.571 4006 | 5641 | 8.571 7025 | 5649  | 1.428 2975 | 9.999 6981 | 8  | 50 |    |
|    | 20 | 8.571 9647 | 5634 | 8.572 2674 | 5642  | 1.427 7326 | 9.999 6973 | 8  | 40 |    |
|    | 30 | 8.572 5281 | 5627 | 8.572 8316 | 5634  | 1.427 1684 | 9.999 6965 | 8  | 30 |    |
|    | 40 | 8.573 0908 | 5619 | 8.573 3950 | 5627  | 1.426 6050 | 9.999 6957 | 7  | 20 |    |
|    | 50 | 8.573 6527 | 5612 | 8.573 9577 | 5620  | 1.426 0423 | 9.999 6950 | 8  | 10 |    |
| 9  | o  | 8.574 2139 | 5605 | 8.574 5197 | 5613  | 1.425 4803 | 9.999 6942 | 8  | o  | 51 |
|    | 10 | 8.574 7744 | 5597 | 8.575 0810 | 5606  | 1.424 9190 | 9.999 6934 | 8  | 50 |    |
|    | 20 | 8.575 3341 | 5591 | 8.575 6416 | 5598  | 1.424 3584 | 9.999 6926 | 8  | 40 |    |
|    | 30 | 8.575 8932 | 5583 | 8.576 2014 | 5591  | 1.423 7986 | 9.999 6918 | 8  | 30 |    |
|    | 40 | 8.576 4515 | 5576 | 8.576 7605 | 5584  | 1.423 2395 | 9.999 6910 | 8  | 20 |    |
|    | 50 | 8.577 0091 | 5569 | 8.577 3189 | 5577  | 1.422 6811 | 9.999 6902 | 8  | 10 |    |
| 10 | o  | 8.577 5660 |      | 8.577 8766 |       | 1.422 1234 | 9.999 6894 | 8  | o  | 50 |
|    |    | Cos        | d.   | Cotg       | d.    | Tang       | Sin        | d. | "  |    |



|    |    | Sin        | d.   | Tang       | d. c. | Cotg       | Cos        | d. |    |    |
|----|----|------------|------|------------|-------|------------|------------|----|----|----|
| 10 | o  | 8.577 5660 | 5561 | 8.577 8766 | 5569  | 1.422 1234 | 9.999 6894 | 8  | o  | 50 |
|    | 10 | 8.578 1221 | 5555 | 8.578 4335 | 5563  | 1.421 5665 | 9.999 6886 | 8  | 50 |    |
|    | 20 | 8.578 6776 | 5547 | 8.578 9898 | 5555  | 1.421 0102 | 9.999 6878 | 8  | 40 |    |
|    | 30 | 8.579 2323 | 5541 | 8.579 5453 | 5548  | 1.420 4547 | 9.999 6870 | 8  | 30 |    |
|    | 40 | 8.579 7864 | 5533 | 8.580 1001 | 5542  | 1.419 8999 | 9.999 6862 | 8  | 20 |    |
|    | 50 | 8.580 3397 | 5526 | 8.580 6543 | 5534  | 1.419 3457 | 9.999 6854 | 8  | 10 |    |
| 11 | o  | 8.580 8923 | 5519 | 8.581 2077 | 5527  | 1.418 7923 | 9.999 6846 | 8  | o  | 49 |
|    | 10 | 8.581 4442 | 5512 | 8.581 7604 | 5520  | 1.418 2396 | 9.999 6838 | 8  | 50 |    |
|    | 20 | 8.581 9954 | 5506 | 8.582 3124 | 5514  | 1.417 6876 | 9.999 6830 | 8  | 40 |    |
|    | 30 | 8.582 5460 | 5498 | 8.582 8638 | 5506  | 1.417 1362 | 9.999 6822 | 8  | 30 |    |
|    | 40 | 8.583 0958 | 5491 | 8.583 4144 | 5499  | 1.416 5856 | 9.999 6814 | 8  | 20 |    |
|    | 50 | 8.583 6449 | 5484 | 8.583 9643 | 5493  | 1.416 0357 | 9.999 6806 | 8  | 10 |    |
| 12 | o  | 8.584 1933 | 5478 | 8.584 5136 | 5485  | 1.415 4864 | 9.999 6798 | 8  | o  | 48 |
|    | 10 | 8.584 7411 | 5470 | 8.585 0621 | 5479  | 1.414 9379 | 9.999 6790 | 8  | 50 |    |
|    | 20 | 8.585 2881 | 5464 | 8.585 6100 | 5471  | 1.414 3900 | 9.999 6782 | 8  | 40 |    |
|    | 30 | 8.585 8345 | 5456 | 8.586 1571 | 5465  | 1.413 8429 | 9.999 6773 | 8  | 30 |    |
|    | 40 | 8.586 3801 | 5450 | 8.586 7036 | 5458  | 1.413 2964 | 9.999 6765 | 8  | 20 |    |
|    | 50 | 8.586 9251 | 5443 | 8.587 2494 | 5451  | 1.412 7506 | 9.999 6757 | 8  | 10 |    |
| 13 | o  | 8.587 4694 | 5436 | 8.587 7945 | 5444  | 1.412 2055 | 9.999 6749 | 8  | o  | 47 |
|    | 10 | 8.588 0130 | 5430 | 8.588 3289 | 5438  | 1.411 6611 | 9.999 6741 | 8  | 50 |    |
|    | 20 | 8.588 5560 | 5422 | 8.588 8827 | 5431  | 1.411 1173 | 9.999 6733 | 8  | 40 |    |
|    | 30 | 8.589 0982 | 5416 | 8.589 4258 | 5424  | 1.410 5742 | 9.999 6724 | 8  | 30 |    |
|    | 40 | 8.589 6398 | 5409 | 8.589 9682 | 5417  | 1.410 0318 | 9.999 6716 | 8  | 20 |    |
|    | 50 | 8.590 1807 | 5402 | 8.590 5099 | 5410  | 1.409 4901 | 9.999 6708 | 8  | 10 |    |
| 14 | o  | 8.590 7209 | 5396 | 8.591 0509 | 5404  | 1.408 9491 | 9.999 6700 | 8  | o  | 46 |
|    | 10 | 8.591 2605 | 5389 | 8.591 5913 | 5397  | 1.408 4087 | 9.999 6692 | 8  | 50 |    |
|    | 20 | 8.591 7994 | 5382 | 8.592 1310 | 5391  | 1.407 8690 | 9.999 6683 | 8  | 40 |    |
|    | 30 | 8.592 3376 | 5375 | 8.592 6701 | 5384  | 1.407 3299 | 9.999 6675 | 8  | 30 |    |
|    | 40 | 8.592 8751 | 5369 | 8.593 2085 | 5377  | 1.406 7915 | 9.999 6667 | 8  | 20 |    |
|    | 50 | 8.593 4120 | 5363 | 8.593 7462 | 5370  | 1.406 2538 | 9.999 6659 | 8  | 10 |    |
| 15 | o  | 8.593 9483 | 5355 | 8.594 2832 | 5364  | 1.405 7168 | 9.999 6650 | 8  | o  | 45 |
|    | 10 | 8.594 4838 | 5349 | 8.594 8196 | 5357  | 1.405 1804 | 9.999 6642 | 8  | 50 |    |
|    | 20 | 8.595 0187 | 5343 | 8.595 3553 | 5351  | 1.404 6447 | 9.999 6634 | 8  | 40 |    |
|    | 30 | 8.595 5530 | 5335 | 8.595 8904 | 5344  | 1.404 1096 | 9.999 6626 | 8  | 30 |    |
|    | 40 | 8.596 0805 | 5330 | 8.596 4248 | 5338  | 1.403 5752 | 9.999 6617 | 8  | 20 |    |
|    | 50 | 8.596 6195 | 5322 | 8.596 9586 | 5331  | 1.403 0414 | 9.999 6609 | 8  | 10 |    |
| 16 | o  | 8.597 1517 | 5317 | 8.597 4917 | 5324  | 1.402 5083 | 9.999 6601 | 8  | o  | 44 |
|    | 10 | 8.597 6834 | 5309 | 8.598 0241 | 5318  | 1.401 9759 | 9.999 6592 | 8  | 50 |    |
|    | 20 | 8.598 2143 | 5303 | 8.598 5559 | 5312  | 1.401 4441 | 9.999 6584 | 8  | 40 |    |
|    | 30 | 8.598 7446 | 5297 | 8.599 0871 | 5305  | 1.400 9129 | 9.999 6576 | 8  | 30 |    |
|    | 40 | 8.599 2743 | 5290 | 8.599 6176 | 5299  | 1.400 3824 | 9.999 6567 | 8  | 20 |    |
|    | 50 | 8.599 8033 | 5284 | 8.600 1475 | 5292  | 1.399 8525 | 9.999 6559 | 8  | 10 |    |
| 17 | o  | 8.600 3317 | 5278 | 8.600 6767 | 5286  | 1.399 3233 | 9.999 6550 | 8  | o  | 43 |
|    | 10 | 8.600 8595 | 5271 | 8.601 2053 | 5279  | 1.398 7947 | 9.999 6542 | 8  | 50 |    |
|    | 20 | 8.601 3866 | 5264 | 8.601 7332 | 5273  | 1.398 2668 | 9.999 6534 | 8  | 40 |    |
|    | 30 | 8.601 9130 | 5258 | 8.602 2605 | 5267  | 1.397 7395 | 9.999 6525 | 8  | 30 |    |
|    | 40 | 8.602 4388 | 5252 | 8.602 7872 | 5260  | 1.397 2128 | 9.999 6517 | 8  | 20 |    |
|    | 50 | 8.602 9640 | 5246 | 8.603 3132 | 5254  | 1.396 6868 | 9.999 6508 | 8  | 10 |    |
| 18 | o  | 8.603 4886 | 5239 | 8.603 8386 | 5247  | 1.396 1614 | 9.999 6500 | 8  | o  | 42 |
|    | 10 | 8.604 0125 | 5232 | 8.604 3633 | 5242  | 1.395 6367 | 9.999 6491 | 8  | 50 |    |
|    | 20 | 8.604 5357 | 5227 | 8.604 8875 | 5235  | 1.395 1125 | 9.999 6483 | 8  | 40 |    |
|    | 30 | 8.605 0584 | 5220 | 8.605 4110 | 5228  | 1.394 5890 | 9.999 6474 | 8  | 30 |    |
|    | 40 | 8.605 5804 | 5214 | 8.605 9338 | 5223  | 1.394 0662 | 9.999 6466 | 8  | 20 |    |
|    | 50 | 8.606 1018 | 5208 | 8.606 4561 | 5216  | 1.393 5439 | 9.999 6457 | 8  | 10 |    |
| 19 | o  | 8.606 6226 | 5201 | 8.606 9777 | 5210  | 1.393 0223 | 9.999 6449 | 8  | o  | 41 |
|    | 10 | 8.607 1427 | 5195 | 8.607 4987 | 5203  | 1.392 5013 | 9.999 6440 | 8  | 50 |    |
|    | 20 | 8.607 6622 | 5189 | 8.608 0190 | 5198  | 1.391 9810 | 9.999 6432 | 8  | 40 |    |
|    | 30 | 8.608 1811 | 5183 | 8.608 5388 | 5191  | 1.391 4612 | 9.999 6423 | 8  | 30 |    |
|    | 40 | 8.608 6994 | 5177 | 8.609 0579 | 5185  | 1.390 9421 | 9.999 6415 | 8  | 20 |    |
|    | 50 | 8.609 2171 | 5170 | 8.609 5764 | 5179  | 1.390 4236 | 9.999 6406 | 8  | 10 |    |
| 20 | o  | 8.609 7341 |      | 8.610 0943 |       | 1.389 9057 | 9.999 6398 | 8  | o  | 40 |
|    |    |            |      |            |       |            |            |    |    |    |
|    |    | Cos        | d.   | Cotg       | d.    | Tang       | Sin        | d. |    |    |



|    | "  | Sin        | d.   | Tang       | d. c. | Cotg       | Cos        | d. | "  |    |
|----|----|------------|------|------------|-------|------------|------------|----|----|----|
| 20 | 0  | 8.609 7341 | 5164 | 8.610 0943 | 5173  | 1.389 9057 | 9.999 6398 | 9  | 0  | 40 |
|    | 10 | 8.610 2505 | 5158 | 8.610 6116 | 5167  | 1.389 3884 | 9.999 6389 | 9  | 50 |    |
|    | 20 | 8.610 7663 | 5152 | 8.611 1283 | 5160  | 1.388 8717 | 9.999 6380 | 9  | 40 |    |
|    | 30 | 8.611 2815 | 5146 | 8.611 6443 | 5155  | 1.388 3557 | 9.999 6372 | 9  | 30 |    |
|    | 40 | 8.611 7961 | 5140 | 8.612 1598 | 5148  | 1.387 8402 | 9.999 6363 | 9  | 20 |    |
|    | 50 | 8.612 3101 | 5134 | 8.612 6746 | 5143  | 1.387 3254 | 9.999 6355 | 9  | 10 |    |
| 21 | 0  | 8.612 8235 | 5127 | 8.613 1889 | 5136  | 1.386 8111 | 9.999 6346 | 9  | 0  | 39 |
|    | 10 | 8.613 3362 | 5122 | 8.613 7025 | 5130  | 1.386 2975 | 9.999 6337 | 9  | 50 |    |
|    | 20 | 8.613 8484 | 5115 | 8.614 2155 | 5124  | 1.385 7845 | 9.999 6329 | 9  | 40 |    |
|    | 30 | 8.614 3599 | 5110 | 8.614 7279 | 5118  | 1.385 2721 | 9.999 6320 | 9  | 30 |    |
|    | 40 | 8.614 8709 | 5103 | 8.615 2397 | 5112  | 1.384 7603 | 9.999 6311 | 9  | 20 |    |
|    | 50 | 8.615 3812 | 5098 | 8.615 7509 | 5107  | 1.384 2491 | 9.999 6303 | 9  | 10 |    |
| 22 | 0  | 8.615 8910 | 5091 | 8.616 2616 | 5100  | 1.383 7384 | 9.999 6294 | 9  | 0  | 88 |
|    | 10 | 8.616 4001 | 5086 | 8.616 7716 | 5094  | 1.383 2284 | 9.999 6285 | 9  | 50 |    |
|    | 20 | 8.616 9087 | 5079 | 8.617 2810 | 5088  | 1.382 7190 | 9.999 6277 | 9  | 40 |    |
|    | 30 | 8.617 4166 | 5074 | 8.617 7898 | 5083  | 1.382 2102 | 9.999 6268 | 9  | 30 |    |
|    | 40 | 8.617 9240 | 5067 | 8.618 2981 | 5076  | 1.381 7019 | 9.999 6259 | 9  | 20 |    |
|    | 50 | 8.618 4307 | 5062 | 8.618 8057 | 5070  | 1.381 1943 | 9.999 6250 | 9  | 10 |    |
| 23 | 0  | 8.618 9369 | 5056 | 8.619 3127 | 5065  | 1.380 6873 | 9.999 6242 | 9  | 0  | 87 |
|    | 10 | 8.619 4425 | 5050 | 8.619 8192 | 5059  | 1.380 1808 | 9.999 6233 | 9  | 50 |    |
|    | 20 | 8.619 9475 | 5044 | 8.620 3251 | 5053  | 1.379 6749 | 9.999 6224 | 9  | 40 |    |
|    | 30 | 8.620 4519 | 5038 | 8.620 8304 | 5047  | 1.379 1696 | 9.999 6215 | 9  | 30 |    |
|    | 40 | 8.620 9557 | 5032 | 8.621 3351 | 5041  | 1.378 6649 | 9.999 6206 | 9  | 20 |    |
|    | 50 | 8.621 4589 | 5027 | 8.621 8392 | 5035  | 1.378 1608 | 9.999 6198 | 9  | 10 |    |
| 24 | 0  | 8.621 9616 | 5021 | 8.622 3427 | 5030  | 1.377 6573 | 9.999 6189 | 9  | 0  | 86 |
|    | 10 | 8.622 4637 | 5015 | 8.622 8457 | 5023  | 1.377 1543 | 9.999 6180 | 9  | 50 |    |
|    | 20 | 8.622 9652 | 5009 | 8.623 3480 | 5018  | 1.376 6520 | 9.999 6171 | 9  | 40 |    |
|    | 30 | 8.623 4661 | 5003 | 8.623 8498 | 5013  | 1.376 1502 | 9.999 6162 | 9  | 30 |    |
|    | 40 | 8.623 9664 | 4998 | 8.624 3511 | 5006  | 1.375 6489 | 9.999 6153 | 9  | 20 |    |
|    | 50 | 8.624 4662 | 4991 | 8.624 8517 | 5001  | 1.375 1483 | 9.999 6145 | 9  | 10 |    |
| 25 | 0  | 8.624 9653 | 4986 | 8.625 3518 | 4995  | 1.374 6482 | 9.999 6136 | 9  | 0  | 85 |
|    | 10 | 8.625 4639 | 4981 | 8.625 8513 | 4989  | 1.374 1487 | 9.999 6127 | 9  | 50 |    |
|    | 20 | 8.625 9620 | 4974 | 8.626 3502 | 4983  | 1.373 6498 | 9.999 6118 | 9  | 40 |    |
|    | 30 | 8.626 4594 | 4969 | 8.626 8485 | 4978  | 1.373 1515 | 9.999 6109 | 9  | 30 |    |
|    | 40 | 8.626 9563 | 4964 | 8.627 3463 | 4972  | 1.372 6537 | 9.999 6100 | 9  | 20 |    |
|    | 50 | 8.627 4527 | 4957 | 8.627 8435 | 4967  | 1.372 1565 | 9.999 6091 | 9  | 10 |    |
| 26 | 0  | 8.627 9484 | 4952 | 8.628 3402 | 4961  | 1.371 6598 | 9.999 6082 | 9  | 0  | 84 |
|    | 10 | 8.628 4436 | 4946 | 8.628 8363 | 4955  | 1.371 1637 | 9.999 6073 | 9  | 50 |    |
|    | 20 | 8.628 9382 | 4941 | 8.629 3318 | 4950  | 1.370 6682 | 9.999 6064 | 9  | 40 |    |
|    | 30 | 8.629 4323 | 4935 | 8.629 8268 | 4943  | 1.370 1732 | 9.999 6055 | 9  | 30 |    |
|    | 40 | 8.629 9258 | 4929 | 8.630 3211 | 4939  | 1.369 6789 | 9.999 6046 | 9  | 20 |    |
|    | 50 | 8.630 4187 | 4924 | 8.630 8150 | 4933  | 1.369 1850 | 9.999 6037 | 9  | 10 |    |
| 27 | 0  | 8.630 9111 | 4918 | 8.631 3083 | 4927  | 1.368 6917 | 9.999 6028 | 9  | 0  | 83 |
|    | 10 | 8.631 4029 | 4913 | 8.631 8010 | 4921  | 1.368 1990 | 9.999 6019 | 9  | 50 |    |
|    | 20 | 8.631 8942 | 4907 | 8.632 2931 | 4917  | 1.367 7069 | 9.999 6010 | 9  | 40 |    |
|    | 30 | 8.632 3849 | 4901 | 8.632 7848 | 4911  | 1.367 2152 | 9.999 6001 | 9  | 30 |    |
|    | 40 | 8.632 8750 | 4896 | 8.633 2758 | 4905  | 1.366 7242 | 9.999 5992 | 9  | 20 |    |
|    | 50 | 8.633 3646 | 4891 | 8.633 7663 | 4900  | 1.366 2337 | 9.999 5983 | 9  | 10 |    |
| 28 | 0  | 8.633 8537 | 4885 | 8.634 2563 | 4894  | 1.365 7437 | 9.999 5974 | 9  | 0  | 82 |
|    | 10 | 8.634 3422 | 4879 | 8.634 7457 | 4888  | 1.365 2543 | 9.999 5965 | 9  | 50 |    |
|    | 20 | 8.634 8301 | 4874 | 8.635 2345 | 4883  | 1.364 7655 | 9.999 5956 | 9  | 40 |    |
|    | 30 | 8.635 3175 | 4868 | 8.635 7228 | 4878  | 1.364 2772 | 9.999 5947 | 9  | 30 |    |
|    | 40 | 8.635 8043 | 4863 | 8.636 2106 | 4872  | 1.363 7894 | 9.999 5938 | 9  | 20 |    |
|    | 50 | 8.636 2906 | 4858 | 8.636 6978 | 4867  | 1.363 3022 | 9.999 5929 | 9  | 10 |    |
| 29 | 0  | 8.636 7764 | 4852 | 8.637 1845 | 4861  | 1.362 8155 | 9.999 5919 | 9  | 0  | 81 |
|    | 10 | 8.637 2616 | 4847 | 8.637 6706 | 4856  | 1.362 3294 | 9.999 5910 | 9  | 50 |    |
|    | 20 | 8.637 7463 | 4841 | 8.638 1562 | 4850  | 1.361 8438 | 9.999 5901 | 9  | 40 |    |
|    | 30 | 8.638 2304 | 4836 | 8.638 6412 | 4845  | 1.361 3588 | 9.999 5892 | 9  | 30 |    |
|    | 40 | 8.638 7140 | 4831 | 8.639 1257 | 4840  | 1.360 8743 | 9.999 5883 | 9  | 20 |    |
|    | 50 | 8.639 1971 | 4825 | 8.639 6097 | 4834  | 1.360 3903 | 9.999 5874 | 9  | 10 |    |
| 30 | 0  | 8.639 6796 | 4820 | 8.640 0931 | 4834  | 1.359 9069 | 9.999 5865 | 9  | 0  | 80 |
|    | "  | Cos        | d.   | Cotg       | d.    | Tang       | Sin        | d. | "  |    |



|    | "  | Sin        | d.   | Tang       | d. c. | Cotg       | Cos        | d. | "  |    |
|----|----|------------|------|------------|-------|------------|------------|----|----|----|
| 30 | 0  | 8.639 6796 | 4819 | 8.640 0931 | 4829  | 1.359 9069 | 9.999 5865 | 10 | 0  | 30 |
|    | 10 | 8.640 1615 | 4815 | 8.640 5760 | 4824  | 1.359 4240 | 9.999 5855 | 9  | 50 |    |
|    | 20 | 8.640 6430 | 4809 | 8.641 0584 | 4818  | 1.358 9416 | 9.999 5846 | 9  | 40 |    |
|    | 30 | 8.641 1239 | 4804 | 8.641 5402 | 4813  | 1.358 4598 | 9.999 5837 | 9  | 30 |    |
|    | 40 | 8.641 6043 | 4798 | 8.642 0215 | 4808  | 1.357 9785 | 9.999 5828 | 10 | 20 |    |
|    | 50 | 8.642 0841 | 4793 | 8.642 5023 | 4802  | 1.357 4977 | 9.999 5818 | 9  | 10 |    |
| 31 | 0  | 8.642 5634 | 4788 | 8.642 9825 | 4797  | 1.357 0175 | 9.999 5809 | 9  | 0  | 29 |
|    | 10 | 8.643 0422 | 4782 | 8.643 4622 | 4792  | 1.356 5378 | 9.999 5800 | 9  | 50 |    |
|    | 20 | 8.643 5204 | 4778 | 8.643 9414 | 4786  | 1.356 0586 | 9.999 5791 | 10 | 40 |    |
|    | 30 | 8.643 9982 | 4772 | 8.644 4200 | 4782  | 1.355 5800 | 9.999 5781 | 9  | 30 |    |
|    | 40 | 8.644 4754 | 4766 | 8.644 8982 | 4776  | 1.355 1018 | 9.999 5772 | 9  | 20 |    |
|    | 50 | 8.644 9520 | 4762 | 8.645 3758 | 4770  | 1.354 6242 | 9.999 5763 | 10 | 10 |    |
| 32 | 0  | 8.645 4282 | 4756 | 8.645 8528 | 4766  | 1.354 1472 | 9.999 5753 | 9  | 0  | 28 |
|    | 10 | 8.645 9038 | 4751 | 8.646 3294 | 4760  | 1.353 6706 | 9.999 5744 | 9  | 50 |    |
|    | 20 | 8.646 3789 | 4746 | 8.646 8054 | 4756  | 1.353 1946 | 9.999 5735 | 10 | 40 |    |
|    | 30 | 8.646 8535 | 4741 | 8.647 2810 | 4750  | 1.352 7190 | 9.999 5725 | 9  | 30 |    |
|    | 40 | 8.647 3276 | 4735 | 8.647 7560 | 4745  | 1.352 2440 | 9.999 5716 | 9  | 20 |    |
|    | 50 | 8.647 8011 | 4731 | 8.648 2305 | 4739  | 1.351 7695 | 9.999 5707 | 10 | 10 |    |
| 33 | 0  | 8.648 2742 | 4725 | 8.648 7044 | 4735  | 1.351 2956 | 9.999 5697 | 9  | 0  | 27 |
|    | 10 | 8.648 7467 | 4720 | 8.649 1779 | 4729  | 1.350 8221 | 9.999 5688 | 9  | 50 |    |
|    | 20 | 8.649 2187 | 4715 | 8.649 6508 | 4725  | 1.350 3492 | 9.999 5679 | 10 | 40 |    |
|    | 30 | 8.649 6902 | 4710 | 8.650 1233 | 4719  | 1.349 8767 | 9.999 5669 | 9  | 30 |    |
|    | 40 | 8.650 1612 | 4704 | 8.650 5952 | 4714  | 1.349 4048 | 9.999 5660 | 10 | 20 |    |
|    | 50 | 8.650 6316 | 4700 | 8.651 0666 | 4709  | 1.348 9334 | 9.999 5650 | 9  | 10 |    |
| 34 | 0  | 8.651 1016 | 4694 | 8.651 5375 | 4704  | 1.348 4625 | 9.999 5641 | 10 | 0  | 26 |
|    | 10 | 8.651 5710 | 4690 | 8.652 0079 | 4699  | 1.347 9921 | 9.999 5631 | 9  | 50 |    |
|    | 20 | 8.652 0400 | 4684 | 8.652 4778 | 4693  | 1.347 5222 | 9.999 5622 | 9  | 40 |    |
|    | 30 | 8.652 5084 | 4679 | 8.652 9471 | 4689  | 1.347 0529 | 9.999 5613 | 10 | 30 |    |
|    | 40 | 8.652 9763 | 4674 | 8.653 4160 | 4684  | 1.346 5840 | 9.999 5603 | 9  | 20 |    |
|    | 50 | 8.653 4437 | 4670 | 8.653 8844 | 4678  | 1.346 1156 | 9.999 5594 | 10 | 10 |    |
| 35 | 0  | 8.653 9107 | 4664 | 8.654 3522 | 4674  | 1.345 6478 | 9.999 5584 | 9  | 0  | 25 |
|    | 10 | 8.654 3771 | 4659 | 8.654 8196 | 4669  | 1.345 1804 | 9.999 5575 | 10 | 50 |    |
|    | 20 | 8.654 8430 | 4654 | 8.655 2865 | 4663  | 1.344 7135 | 9.999 5565 | 9  | 40 |    |
|    | 30 | 8.655 3084 | 4649 | 8.655 7528 | 4659  | 1.344 2472 | 9.999 5556 | 10 | 30 |    |
|    | 40 | 8.655 7733 | 4644 | 8.656 2187 | 4654  | 1.343 7813 | 9.999 5546 | 9  | 20 |    |
|    | 50 | 8.656 2377 | 4640 | 8.656 6841 | 4649  | 1.343 3159 | 9.999 5536 | 10 | 10 |    |
| 36 | 0  | 8.656 7017 | 4634 | 8.657 1490 | 4643  | 1.342 8510 | 9.999 5527 | 9  | 0  | 24 |
|    | 10 | 8.657 1651 | 4629 | 8.657 6133 | 4639  | 1.342 3867 | 9.999 5517 | 10 | 50 |    |
|    | 20 | 8.657 6280 | 4624 | 8.658 0772 | 4634  | 1.341 9228 | 9.999 5508 | 9  | 40 |    |
|    | 30 | 8.658 0904 | 4620 | 8.658 5406 | 4629  | 1.341 4594 | 9.999 5498 | 10 | 30 |    |
|    | 40 | 8.658 5524 | 4614 | 8.659 0035 | 4624  | 1.340 9965 | 9.999 5489 | 9  | 20 |    |
|    | 50 | 8.659 0138 | 4610 | 8.659 4659 | 4620  | 1.340 5341 | 9.999 5479 | 10 | 10 |    |
| 37 | 0  | 8.659 4748 | 4605 | 8.659 9279 | 4614  | 1.340 0721 | 9.999 5469 | 9  | 0  | 23 |
|    | 10 | 8.659 9353 | 4599 | 8.660 3893 | 4609  | 1.339 6107 | 9.999 5460 | 10 | 50 |    |
|    | 20 | 8.660 3952 | 4595 | 8.660 8502 | 4605  | 1.339 1498 | 9.999 5450 | 9  | 40 |    |
|    | 30 | 8.660 8547 | 4590 | 8.661 3107 | 4600  | 1.338 6893 | 9.999 5440 | 10 | 30 |    |
|    | 40 | 8.661 3137 | 4586 | 8.661 7707 | 4594  | 1.338 2293 | 9.999 5431 | 9  | 20 |    |
|    | 50 | 8.661 7723 | 4580 | 8.662 2301 | 4590  | 1.337 7699 | 9.999 5421 | 10 | 10 |    |
| 38 | 0  | 8.662 2303 | 4575 | 8.662 6891 | 4586  | 1.337 3109 | 9.999 5411 | 9  | 0  | 22 |
|    | 10 | 8.662 6878 | 4571 | 8.663 1477 | 4580  | 1.336 8523 | 9.999 5402 | 10 | 50 |    |
|    | 20 | 8.663 1449 | 4566 | 8.663 6057 | 4576  | 1.336 3943 | 9.999 5392 | 9  | 40 |    |
|    | 30 | 8.663 6015 | 4561 | 8.664 0633 | 4570  | 1.335 9367 | 9.999 5382 | 10 | 30 |    |
|    | 40 | 8.664 0576 | 4556 | 8.664 5203 | 4567  | 1.335 4797 | 9.999 5373 | 9  | 20 |    |
|    | 50 | 8.664 5132 | 4552 | 8.664 9770 | 4561  | 1.335 0230 | 9.999 5363 | 10 | 10 |    |
| 39 | 0  | 8.664 9684 | 4547 | 8.665 4331 | 4556  | 1.334 5669 | 9.999 5353 | 9  | 0  | 21 |
|    | 10 | 8.665 4231 | 4542 | 8.665 8887 | 4552  | 1.334 1113 | 9.999 5343 | 10 | 50 |    |
|    | 20 | 8.665 8773 | 4537 | 8.666 3439 | 4547  | 1.333 6561 | 9.999 5334 | 9  | 40 |    |
|    | 30 | 8.666 3310 | 4532 | 8.666 7986 | 4542  | 1.333 2014 | 9.999 5324 | 10 | 30 |    |
|    | 40 | 8.666 7842 | 4528 | 8.667 2528 | 4538  | 1.332 7472 | 9.999 5314 | 9  | 20 |    |
|    | 50 | 8.667 2370 | 4523 | 8.667 7066 | 4532  | 1.332 2934 | 9.999 5304 | 10 | 10 |    |
| 40 | 0  | 8.667 6893 | 4518 | 8.668 1598 | 4527  | 1.331 8402 | 9.999 5295 | 9  | 0  | 20 |
|    |    |            |      |            |       |            |            |    |    |    |
|    | "  | Cos        | d.   | Cotg       | d.    | Tang       | Sin        | d. | "  |    |



| i  | "  | Sin        | d.   | Tang       | d. c. | Cotg       | Cos        | d. | "  | i  |
|----|----|------------|------|------------|-------|------------|------------|----|----|----|
| 40 | o  | 8.667 6893 | 4518 | 8.668 1598 | 4529  | 1.331 8402 | 9.999 5295 | 10 | o  | 20 |
|    | 10 | 8.668 1411 | 4514 | 8.668 6127 | 4523  | 1.331 3873 | 9.999 5285 | 10 | 50 |    |
|    | 20 | 8.668 5925 | 4509 | 8.669 0650 | 4519  | 1.330 9350 | 9.999 5275 | 10 | 40 |    |
|    | 30 | 8.669 0434 | 4504 | 8.669 5169 | 4514  | 1.330 4831 | 9.999 5265 | 10 | 30 |    |
|    | 40 | 8.669 4938 | 4499 | 8.669 9683 | 4509  | 1.330 0317 | 9.999 5255 | 10 | 20 |    |
|    | 50 | 8.669 9437 | 4495 | 8.670 4192 | 4505  | 1.329 5808 | 9.999 5245 | 9  | 10 |    |
| 41 | o  | 8.670 3932 | 4490 | 8.670 8697 | 4500  | 1.329 1303 | 9.999 5236 | 10 | o  | 19 |
|    | 10 | 8.670 8422 | 4486 | 8.671 3197 | 4495  | 1.328 6803 | 9.999 5226 | 10 | 50 |    |
|    | 20 | 8.671 2908 | 4481 | 8.671 7692 | 4491  | 1.328 2308 | 9.999 5216 | 10 | 40 |    |
|    | 30 | 8.671 7389 | 4476 | 8.672 2183 | 4486  | 1.327 7817 | 9.999 5206 | 10 | 30 |    |
|    | 40 | 8.672 1865 | 4472 | 8.672 6669 | 4482  | 1.327 3331 | 9.999 5196 | 10 | 20 |    |
|    | 50 | 8.672 6337 | 4467 | 8.673 1151 | 4477  | 1.326 8849 | 9.999 5186 | 10 | 10 |    |
| 42 | o  | 8.673 0804 | 4462 | 8.673 5628 | 4472  | 1.326 4372 | 9.999 5176 | 10 | o  | 18 |
|    | 10 | 8.673 5266 | 4458 | 8.674 0100 | 4468  | 1.325 9900 | 9.999 5166 | 10 | 50 |    |
|    | 20 | 8.673 9724 | 4453 | 8.674 4568 | 4463  | 1.325 5432 | 9.999 5156 | 10 | 40 |    |
|    | 30 | 8.674 4177 | 4449 | 8.674 9031 | 4459  | 1.325 0969 | 9.999 5146 | 10 | 30 |    |
|    | 40 | 8.674 8626 | 4444 | 8.675 3490 | 4454  | 1.324 6510 | 9.999 5136 | 10 | 20 |    |
|    | 50 | 8.675 3070 | 4440 | 8.675 7944 | 4449  | 1.324 2056 | 9.999 5126 | 10 | 10 |    |
| 43 | o  | 8.675 7510 | 4435 | 8.676 2393 | 4446  | 1.323 7607 | 9.999 5116 | 10 | o  | 17 |
|    | 10 | 8.676 1945 | 4430 | 8.676 6839 | 4440  | 1.323 3161 | 9.999 5106 | 10 | 50 |    |
|    | 20 | 8.676 6375 | 4426 | 8.677 1279 | 4436  | 1.322 8721 | 9.999 5096 | 10 | 40 |    |
|    | 30 | 8.677 0801 | 4422 | 8.677 5715 | 4432  | 1.322 4285 | 9.999 5086 | 10 | 30 |    |
|    | 40 | 8.677 5223 | 4417 | 8.678 0147 | 4426  | 1.321 9853 | 9.999 5076 | 10 | 20 |    |
|    | 50 | 8.677 9640 | 4412 | 8.678 4573 | 4423  | 1.321 5427 | 9.999 5066 | 10 | 10 |    |
| 44 | o  | 8.678 4052 | 4408 | 8.678 8996 | 4418  | 1.321 1004 | 9.999 5056 | 10 | o  | 16 |
|    | 10 | 8.678 8460 | 4404 | 8.679 3414 | 4414  | 1.320 6586 | 9.999 5046 | 10 | 50 |    |
|    | 20 | 8.679 2864 | 4399 | 8.679 7828 | 4409  | 1.320 2172 | 9.999 5036 | 10 | 40 |    |
|    | 30 | 8.679 7263 | 4394 | 8.680 2237 | 4404  | 1.319 7763 | 9.999 5026 | 10 | 30 |    |
|    | 40 | 8.680 1657 | 4390 | 8.680 6641 | 4401  | 1.319 3359 | 9.999 5016 | 10 | 20 |    |
|    | 50 | 8.680 6047 | 4386 | 8.681 1042 | 4395  | 1.318 8958 | 9.999 5006 | 10 | 10 |    |
| 45 | o  | 8.681 0433 | 4381 | 8.681 5437 | 4392  | 1.318 4563 | 9.999 4996 | 10 | o  | 15 |
|    | 10 | 8.681 4814 | 4377 | 8.681 9829 | 4387  | 1.318 0171 | 9.999 4986 | 11 | 50 |    |
|    | 20 | 8.681 9191 | 4372 | 8.682 4216 | 4382  | 1.317 5784 | 9.999 4975 | 10 | 40 |    |
|    | 30 | 8.682 3563 | 4368 | 8.682 8598 | 4378  | 1.317 1402 | 9.999 4965 | 10 | 30 |    |
|    | 40 | 8.682 7931 | 4364 | 8.683 2976 | 4374  | 1.316 7024 | 9.999 4955 | 10 | 20 |    |
|    | 50 | 8.683 2295 | 4359 | 8.683 7350 | 4369  | 1.316 2650 | 9.999 4945 | 10 | 10 |    |
| 46 | c  | 8.683 6654 | 4355 | 8.684 1719 | 4365  | 1.315 8281 | 9.999 4935 | 10 | o  | 14 |
|    | 10 | 8.684 1009 | 4350 | 8.684 6084 | 4361  | 1.315 3916 | 9.999 4925 | 11 | 50 |    |
|    | 20 | 8.684 5359 | 4347 | 8.685 0445 | 4356  | 1.314 9555 | 9.999 4914 | 10 | 40 |    |
|    | 30 | 8.684 9706 | 4341 | 8.685 4801 | 4352  | 1.314 5199 | 9.999 4904 | 10 | 30 |    |
|    | 40 | 8.685 4047 | 4338 | 8.685 9153 | 4348  | 1.314 0847 | 9.999 4894 | 10 | 20 |    |
|    | 50 | 8.685 8385 | 4333 | 8.686 3501 | 4343  | 1.313 6499 | 9.999 4884 | 10 | 10 |    |
| 47 | o  | 8.686 2718 | 4328 | 8.686 7844 | 4339  | 1.313 2156 | 9.999 4874 | 11 | o  | 13 |
|    | 10 | 8.686 7046 | 4325 | 8.687 2183 | 4335  | 1.312 7817 | 9.999 4863 | 10 | 50 |    |
|    | 20 | 8.687 1371 | 4320 | 8.687 6518 | 4330  | 1.312 3482 | 9.999 4853 | 10 | 40 |    |
|    | 30 | 8.687 5691 | 4316 | 8.688 0848 | 4326  | 1.311 9152 | 9.999 4843 | 10 | 30 |    |
|    | 40 | 8.688 0007 | 4311 | 8.688 5174 | 4322  | 1.311 4826 | 9.999 4833 | 11 | 20 |    |
|    | 50 | 8.688 4318 | 4307 | 8.688 9496 | 4317  | 1.311 0504 | 9.999 4822 | 10 | 10 |    |
| 48 | o  | 8.688 8625 | 4303 | 8.689 3813 | 4313  | 1.310 6187 | 9.999 4812 | 10 | o  | 12 |
|    | 10 | 8.689 2928 | 4299 | 8.689 8126 | 4309  | 1.310 1874 | 9.999 4802 | 11 | 50 |    |
|    | 20 | 8.689 7227 | 4294 | 8.690 2435 | 4305  | 1.309 7565 | 9.999 4791 | 10 | 40 |    |
|    | 30 | 8.690 1521 | 4290 | 8.690 6740 | 4301  | 1.309 3260 | 9.999 4781 | 10 | 30 |    |
|    | 40 | 8.690 5811 | 4286 | 8.691 1041 | 4296  | 1.308 8959 | 9.999 4771 | 11 | 20 |    |
|    | 50 | 8.691 0097 | 4282 | 8.691 5337 | 4292  | 1.308 4663 | 9.999 4760 | 10 | 10 |    |
| 49 | o  | 8.691 4379 | 4277 | 8.691 9629 | 4288  | 1.308 0371 | 9.999 4750 | 10 | o  | 11 |
|    | 10 | 8.691 8656 | 4273 | 8.692 3917 | 4283  | 1.307 6083 | 9.999 4740 | 11 | 50 |    |
|    | 20 | 8.692 2929 | 4269 | 8.692 8200 | 4279  | 1.307 1800 | 9.999 4729 | 10 | 40 |    |
|    | 30 | 8.692 7198 | 4265 | 8.693 2479 | 4276  | 1.306 7521 | 9.999 4719 | 10 | 30 |    |
|    | 40 | 8.693 1463 | 4261 | 8.693 6755 | 4271  | 1.306 3245 | 9.999 4709 | 11 | 20 |    |
|    | 50 | 8.693 5724 | 4256 | 8.694 1026 | 4266  | 1.305 8974 | 9.999 4698 | 10 | 10 |    |
| 50 | o  | 8.693 9980 | 4252 | 8.694 5292 | 4262  | 1.305 4708 | 9.999 4688 | 10 | o  | 10 |
|    |    | Sin        | d.   | Cotg       | d.    | Tang       | Sin        | d. | "  | i  |



|    | "  | Sin        | d.   | Tang       | d. c. | Cotg       | Cos        | d. | "  | '  |
|----|----|------------|------|------------|-------|------------|------------|----|----|----|
| 50 | o  | 8.693 9980 | 4252 | 8.694 5292 | 4263  | 1.305 4708 | 9.999 4688 | II | o  | 10 |
|    | 10 | 8.694 4232 | 4248 | 8.694 9555 | 4259  | 1.305 0445 | 9.999 4677 | II | 50 |    |
|    | 20 | 8.694 8480 | 4244 | 8.695 3814 | 4254  | 1.304 6186 | 9.999 4667 | II | 40 |    |
|    | 30 | 8.695 2724 | 4240 | 8.695 8068 | 4250  | 1.304 1932 | 9.999 4656 | II | 30 |    |
|    | 40 | 8.695 6964 | 4236 | 8.696 2318 | 4246  | 1.303 7682 | 9.999 4646 | II | 20 |    |
|    | 50 | 8.696 1200 | 4231 | 8.696 6564 | 4242  | 1.303 3436 | 9.999 4635 | II | 10 |    |
| 51 | o  | 8.696 5431 | 4228 | 8.697 0806 | 4238  | 1.302 9194 | 9.999 4625 | II | o  | 9  |
|    | 10 | 8.696 9659 | 4223 | 8.697 5044 | 4234  | 1.302 4956 | 9.999 4615 | II | 50 |    |
|    | 20 | 8.697 3882 | 4219 | 8.697 9278 | 4229  | 1.302 0722 | 9.999 4604 | II | 40 |    |
|    | 30 | 8.697 8101 | 4215 | 8.698 3507 | 4226  | 1.301 6493 | 9.999 4594 | II | 30 |    |
|    | 40 | 8.698 2316 | 4211 | 8.698 7733 | 4221  | 1.301 2267 | 9.999 4583 | II | 20 |    |
|    | 50 | 8.698 6527 | 4207 | 8.699 1954 | 4218  | 1.300 8046 | 9.999 4572 | II | 10 |    |
| 52 | o  | 8.699 0734 | 4202 | 8.699 6172 | 4213  | 1.300 3828 | 9.999 4562 | II | o  | 8  |
|    | 10 | 8.699 4936 | 4199 | 8.700 0385 | 4209  | 1.299 9615 | 9.999 4551 | II | 50 |    |
|    | 20 | 8.699 9135 | 4195 | 8.700 4594 | 4205  | 1.299 5406 | 9.999 4541 | II | 40 |    |
|    | 30 | 8.700 3330 | 4190 | 8.700 8799 | 4201  | 1.299 1201 | 9.999 4530 | II | 30 |    |
|    | 40 | 8.700 7520 | 4187 | 8.701 3000 | 4197  | 1.298 7000 | 9.999 4520 | II | 20 |    |
|    | 50 | 8.701 1707 | 4182 | 8.701 7197 | 4193  | 1.298 2803 | 9.999 4509 | II | 10 |    |
| 53 | o  | 8.701 5889 | 4178 | 8.702 1390 | 4190  | 1.297 8610 | 9.999 4498 | II | o  | 7  |
|    | 10 | 8.702 0067 | 4175 | 8.702 5580 | 4185  | 1.297 4420 | 9.999 4488 | II | 50 |    |
|    | 20 | 8.702 4242 | 4170 | 8.702 9765 | 4181  | 1.297 0235 | 9.999 4477 | II | 40 |    |
|    | 30 | 8.702 8412 | 4166 | 8.703 3946 | 4176  | 1.296 6054 | 9.999 4467 | II | 30 |    |
|    | 40 | 8.703 2578 | 4163 | 8.703 8122 | 4173  | 1.296 1878 | 9.999 4456 | II | 20 |    |
|    | 50 | 8.703 6741 | 4158 | 8.704 2295 | 4170  | 1.295 7705 | 9.999 4445 | II | 10 |    |
| 54 | o  | 8.704 0899 | 4155 | 8.704 6465 | 4165  | 1.295 3535 | 9.999 4435 | II | o  | 6  |
|    | 10 | 8.704 5054 | 4150 | 8.705 0630 | 4161  | 1.294 9370 | 9.999 4424 | II | 50 |    |
|    | 20 | 8.704 9204 | 4146 | 8.705 4791 | 4157  | 1.294 5209 | 9.999 4413 | II | 40 |    |
|    | 30 | 8.705 3350 | 4143 | 8.705 8948 | 4153  | 1.294 1052 | 9.999 4403 | II | 30 |    |
|    | 40 | 8.705 7493 | 4138 | 8.706 3101 | 4149  | 1.293 6899 | 9.999 4392 | II | 20 |    |
|    | 50 | 8.706 1631 | 4135 | 8.706 7250 | 4145  | 1.293 2750 | 9.999 4381 | II | 10 |    |
| 55 | o  | 8.706 5766 | 4130 | 8.707 1395 | 4142  | 1.292 8605 | 9.999 4370 | II | o  | 5  |
|    | 10 | 8.706 9896 | 4127 | 8.707 5537 | 4137  | 1.292 4463 | 9.999 4360 | II | 50 |    |
|    | 20 | 8.707 4023 | 4123 | 8.707 9674 | 4134  | 1.292 0326 | 9.999 4349 | II | 40 |    |
|    | 30 | 8.707 8146 | 4119 | 8.708 3808 | 4129  | 1.291 6192 | 9.999 4338 | II | 30 |    |
|    | 40 | 8.708 2265 | 4115 | 8.708 7937 | 4126  | 1.291 2063 | 9.999 4328 | II | 20 |    |
|    | 50 | 8.708 6380 | 4110 | 8.709 2063 | 4122  | 1.290 7937 | 9.999 4317 | II | 10 |    |
| 56 | o  | 8.709 0490 | 4108 | 8.709 6185 | 4117  | 1.290 3815 | 9.999 4306 | II | o  | 4  |
|    | 10 | 8.709 4598 | 4103 | 8.710 0302 | 4114  | 1.289 9698 | 9.999 4295 | II | 50 |    |
|    | 20 | 8.709 8701 | 4099 | 8.710 4416 | 4111  | 1.289 5584 | 9.999 4284 | II | 40 |    |
|    | 30 | 8.710 2800 | 4096 | 8.710 8527 | 4106  | 1.289 1473 | 9.999 4274 | II | 30 |    |
|    | 40 | 8.710 6896 | 4091 | 8.711 2633 | 4102  | 1.288 7367 | 9.999 4263 | II | 20 |    |
|    | 50 | 8.711 0987 | 4088 | 8.711 6735 | 4099  | 1.288 3265 | 9.999 4252 | II | 10 |    |
| 57 | o  | 8.711 5075 | 4084 | 8.712 0834 | 4095  | 1.287 9166 | 9.999 4241 | II | o  | 3  |
|    | 10 | 8.711 9159 | 4080 | 8.712 4929 | 4090  | 1.287 5071 | 9.999 4230 | II | 50 |    |
|    | 20 | 8.712 3239 | 4076 | 8.712 9019 | 4087  | 1.287 0981 | 9.999 4219 | II | 40 |    |
|    | 30 | 8.712 7315 | 4072 | 8.713 3106 | 4084  | 1.286 6894 | 9.999 4208 | II | 30 |    |
|    | 40 | 8.713 1387 | 4069 | 8.713 7190 | 4079  | 1.286 2810 | 9.999 4198 | II | 20 |    |
|    | 50 | 8.713 5456 | 4064 | 8.714 1269 | 4076  | 1.285 8731 | 9.999 4187 | II | 10 |    |
| 58 | o  | 8.713 9520 | 4061 | 8.714 5345 | 4072  | 1.285 4655 | 9.999 4176 | II | o  | 2  |
|    | 10 | 8.714 3581 | 4057 | 8.714 9417 | 4068  | 1.285 0583 | 9.999 4165 | II | 50 |    |
|    | 20 | 8.714 7638 | 4054 | 8.715 3485 | 4064  | 1.284 6515 | 9.999 4154 | II | 40 |    |
|    | 30 | 8.715 1692 | 4049 | 8.715 7549 | 4060  | 1.284 2451 | 9.999 4143 | II | 30 |    |
|    | 40 | 8.715 5741 | 4046 | 8.716 1609 | 4057  | 1.283 8391 | 9.999 4132 | II | 20 |    |
|    | 50 | 8.715 9787 | 4042 | 8.716 5666 | 4053  | 1.283 4334 | 9.999 4121 | II | 10 |    |
| 59 | o  | 8.716 3829 | 4038 | 8.716 9719 | 4049  | 1.283 0281 | 9.999 4110 | II | o  | 1  |
|    | 10 | 8.716 7867 | 4034 | 8.717 3768 | 4045  | 1.282 6232 | 9.999 4099 | II | 50 |    |
|    | 20 | 8.717 1901 | 4031 | 8.717 7813 | 4042  | 1.282 2187 | 9.999 4088 | II | 40 |    |
|    | 30 | 8.717 5932 | 4027 | 8.718 1855 | 4038  | 1.281 8145 | 9.999 4077 | II | 30 |    |
|    | 40 | 8.717 9959 | 4023 | 8.718 5893 | 4034  | 1.281 4107 | 9.999 4066 | II | 20 |    |
|    | 50 | 8.718 3982 | 4020 | 8.718 9927 | 4031  | 1.281 0073 | 9.999 4055 | II | 10 |    |
| 60 | o  | 8.718 8002 |      | 8.719 3958 |       | 1.280 6042 | 9.999 4044 | II | o  | 0  |
|    |    |            |      |            |       |            |            |    |    |    |
|    | "  | Cos        | d.   | Cotg       | d.    | Tang       | Sin        | d. | "  | '  |



|    | "  | Sin        | d.   | Tang       | d. c. | Cotg       | Cos        | d. | "  |    |
|----|----|------------|------|------------|-------|------------|------------|----|----|----|
| 0  | o  | 8.718 8002 | 4015 | 8.719 3958 | 4026  | 1.280 6042 | 9.999 4044 | 11 | o  | 60 |
|    | 10 | 8.719 2017 | 4012 | 8.719 7984 | 4023  | 1.280 2016 | 9.999 4033 | 11 | 50 |    |
|    | 20 | 8.719 6029 | 4009 | 8.720 2007 | 4020  | 1.279 7993 | 9.999 4022 | 11 | 40 |    |
|    | 30 | 8.720 0038 | 4004 | 8.720 6027 | 4015  | 1.279 3973 | 9.999 4011 | 11 | 30 |    |
|    | 40 | 8.720 4042 | 4001 | 8.721 0042 | 4012  | 1.278 9958 | 9.999 4000 | 11 | 20 |    |
|    | 50 | 8.720 8043 | 3997 | 8.721 4054 | 4009  | 1.278 5946 | 9.999 3989 | 11 | 10 |    |
| 1  | o  | 8.721 2040 | 3994 | 8.721 8063 | 4004  | 1.278 1937 | 9.999 3978 | 11 | o  | 59 |
|    | 10 | 8.721 6034 | 3990 | 8.722 2067 | 4001  | 1.277 7933 | 9.999 3967 | 12 | 50 |    |
|    | 20 | 8.722 0024 | 3986 | 8.722 6068 | 3997  | 1.277 3932 | 9.999 3955 | 11 | 40 |    |
|    | 30 | 8.722 4010 | 3982 | 8.723 0065 | 3994  | 1.276 9935 | 9.999 3944 | 11 | 30 |    |
|    | 40 | 8.722 7992 | 3979 | 8.723 4059 | 3990  | 1.276 5941 | 9.999 3933 | 11 | 20 |    |
|    | 50 | 8.723 1971 | 3975 | 8.723 8049 | 3986  | 1.276 1951 | 9.999 3922 | 11 | 10 |    |
| 2  | o  | 8.723 5946 | 3972 | 8.724 2035 | 3983  | 1.275 7965 | 9.999 3911 | 11 | o  | 58 |
|    | 10 | 8.723 9918 | 3968 | 8.724 6018 | 3979  | 1.275 3982 | 9.999 3900 | 11 | 50 |    |
|    | 20 | 8.724 3886 | 3964 | 8.724 9997 | 3975  | 1.275 0003 | 9.999 3889 | 12 | 40 |    |
|    | 30 | 8.724 7850 | 3960 | 8.725 3972 | 3972  | 1.274 6028 | 9.999 3877 | 11 | 30 |    |
|    | 40 | 8.725 1810 | 3957 | 8.725 7944 | 3968  | 1.274 2056 | 9.999 3866 | 11 | 20 |    |
|    | 50 | 8.725 5767 | 3954 | 8.726 1912 | 3965  | 1.273 8088 | 9.999 3855 | 11 | 10 |    |
| 3  | o  | 8.725 9721 | 3950 | 8.726 5877 | 3961  | 1.273 4123 | 9.999 3844 | 11 | o  | 57 |
|    | 10 | 8.726 3671 | 3946 | 8.726 9838 | 3957  | 1.273 0162 | 9.999 3833 | 12 | 50 |    |
|    | 20 | 8.726 7617 | 3942 | 8.727 3795 | 3954  | 1.272 6205 | 9.999 3821 | 11 | 40 |    |
|    | 30 | 8.727 1559 | 3939 | 8.727 7749 | 3951  | 1.272 2251 | 9.999 3810 | 11 | 30 |    |
|    | 40 | 8.727 5498 | 3936 | 8.728 1700 | 3946  | 1.271 8300 | 9.999 3799 | 11 | 20 |    |
|    | 50 | 8.727 9434 | 3932 | 8.728 5646 | 3943  | 1.271 4354 | 9.999 3788 | 12 | 10 |    |
| 4  | o  | 8.728 3366 | 3928 | 8.728 9589 | 3940  | 1.271 0411 | 9.999 3776 | 11 | o  | 56 |
|    | 10 | 8.728 7294 | 3925 | 8.729 3529 | 3936  | 1.270 6471 | 9.999 3765 | 11 | 50 |    |
|    | 20 | 8.729 1219 | 3921 | 8.729 7465 | 3932  | 1.270 2535 | 9.999 3754 | 12 | 40 |    |
|    | 30 | 8.729 5140 | 3917 | 8.730 1397 | 3929  | 1.269 8603 | 9.999 3742 | 11 | 30 |    |
|    | 40 | 8.729 9057 | 3915 | 8.730 5326 | 3926  | 1.269 4674 | 9.999 3731 | 11 | 20 |    |
|    | 50 | 8.730 2972 | 3910 | 8.730 9252 | 3922  | 1.269 0748 | 9.999 3720 | 12 | 10 |    |
| 5  | o  | 8.730 6882 | 3907 | 8.731 3174 | 3918  | 1.268 6826 | 9.999 3708 | 11 | o  | 55 |
|    | 10 | 8.731 0789 | 3904 | 8.731 7092 | 3915  | 1.268 2908 | 9.999 3697 | 11 | 50 |    |
|    | 20 | 8.731 4693 | 3900 | 8.732 1007 | 3911  | 1.267 8993 | 9.999 3686 | 12 | 40 |    |
|    | 30 | 8.731 8593 | 3896 | 8.732 4918 | 3908  | 1.267 5082 | 9.999 3674 | 11 | 30 |    |
|    | 40 | 8.732 2489 | 3893 | 8.732 8826 | 3904  | 1.267 1174 | 9.999 3663 | 11 | 20 |    |
|    | 50 | 8.732 6382 | 3890 | 8.733 2730 | 3901  | 1.266 7270 | 9.999 3652 | 12 | 10 |    |
| 6  | o  | 8.733 0272 | 3885 | 8.733 6631 | 3898  | 1.266 3369 | 9.999 3640 | 11 | o  | 54 |
|    | 10 | 8.733 4157 | 3883 | 8.734 0529 | 3894  | 1.265 9471 | 9.999 3629 | 12 | 50 |    |
|    | 20 | 8.733 8040 | 3879 | 8.734 4423 | 3890  | 1.265 5577 | 9.999 3617 | 11 | 40 |    |
|    | 30 | 8.734 1919 | 3876 | 8.734 8313 | 3887  | 1.265 1687 | 9.999 3606 | 12 | 30 |    |
|    | 40 | 8.734 5795 | 3872 | 8.735 2200 | 3884  | 1.264 7800 | 9.999 3594 | 11 | 20 |    |
|    | 50 | 8.734 9667 | 3868 | 8.735 6084 | 3880  | 1.264 3916 | 9.999 3583 | 11 | 10 |    |
| 7  | o  | 8.735 3535 | 3865 | 8.735 9964 | 3876  | 1.264 0036 | 9.999 3572 | 12 | o  | 53 |
|    | 10 | 8.735 7400 | 3862 | 8.736 3840 | 3874  | 1.263 6160 | 9.999 3560 | 11 | 50 |    |
|    | 20 | 8.736 1262 | 3858 | 8.736 7714 | 3869  | 1.263 2286 | 9.999 3549 | 12 | 40 |    |
|    | 30 | 8.736 5120 | 3855 | 8.737 1583 | 3867  | 1.262 8417 | 9.999 3537 | 11 | 30 |    |
|    | 40 | 8.736 8975 | 3852 | 8.737 5450 | 3863  | 1.262 4550 | 9.999 3526 | 12 | 20 |    |
|    | 50 | 8.737 2827 | 3848 | 8.737 9313 | 3859  | 1.262 0687 | 9.999 3514 | 11 | 10 |    |
| 8  | o  | 8.737 6675 | 3844 | 8.738 3172 | 3856  | 1.261 6828 | 9.999 3503 | 12 | o  | 52 |
|    | 10 | 8.738 0519 | 3841 | 8.738 7028 | 3853  | 1.261 2972 | 9.999 3491 | 11 | 50 |    |
|    | 20 | 8.738 4360 | 3838 | 8.739 0881 | 3849  | 1.260 9119 | 9.999 3480 | 12 | 40 |    |
|    | 30 | 8.738 8198 | 3835 | 8.739 4730 | 3846  | 1.260 5270 | 9.999 3468 | 12 | 30 |    |
|    | 40 | 8.739 2033 | 3831 | 8.739 8576 | 3843  | 1.260 1424 | 9.999 3456 | 11 | 20 |    |
|    | 50 | 8.739 5864 | 3827 | 8.740 2419 | 3839  | 1.259 7581 | 9.999 3445 | 12 | 10 |    |
| 9  | o  | 8.739 9691 | 3824 | 8.740 6258 | 3836  | 1.259 3742 | 9.999 3433 | 11 | o  | 51 |
|    | 10 | 8.740 3515 | 3821 | 8.741 0094 | 3832  | 1.258 9906 | 9.999 3422 | 12 | 50 |    |
|    | 20 | 8.740 7336 | 3818 | 8.741 3926 | 3829  | 1.258 6074 | 9.999 3410 | 12 | 40 |    |
|    | 30 | 8.741 1154 | 3814 | 8.741 7755 | 3826  | 1.258 2245 | 9.999 3398 | 11 | 30 |    |
|    | 40 | 8.741 4968 | 3811 | 8.742 1581 | 3822  | 1.257 8419 | 9.999 3387 | 12 | 20 |    |
|    | 50 | 8.741 8779 | 3807 | 8.742 5403 | 3819  | 1.257 4597 | 9.999 3375 | 11 | 10 |    |
| 10 | o  | 8.742 2586 |      | 8.742 9222 |       | 1.257 0778 | 9.999 3364 | 11 | o  | 50 |
|    | "  | Cos        | d.   | Cotg       | d.    | Tang       | Sin        | d. | "  |    |



|    | "  | Sin        | d.   | Tang       | d. c. | Cotg       | Cos        | d. | "  |    |
|----|----|------------|------|------------|-------|------------|------------|----|----|----|
| 10 | o  | 8.742 2586 | 3804 | 8.742 9222 | 3816  | 1.257 0778 | 9.999 3364 | 12 | o  | 50 |
| 10 | 10 | 8.742 6390 | 3801 | 8.743 3038 | 3812  | 1.256 6962 | 9.999 3352 | 12 | 50 |    |
| 20 | 20 | 8.743 0191 | 3797 | 8.743 6850 | 3810  | 1.256 3150 | 9.999 3340 | 12 | 40 |    |
| 30 | 30 | 8.743 3988 | 3794 | 8.744 0660 | 3805  | 1.255 9340 | 9.999 3329 | 12 | 30 |    |
| 40 | 40 | 8.743 7782 | 3791 | 8.744 4465 | 3803  | 1.255 5535 | 9.999 3317 | 12 | 20 |    |
| 50 | 50 | 8.744 1573 | 3787 | 8.744 8268 | 3799  | 1.255 1732 | 9.999 3305 | 12 | 10 |    |
| 11 | o  | 8.744 5360 | 3784 | 8.745 2067 | 3796  | 1.254 7933 | 9.999 3293 | 12 | o  | 49 |
| 10 | 10 | 8.744 9144 | 3781 | 8.745 5863 | 3792  | 1.254 4137 | 9.999 3282 | 12 | 50 |    |
| 20 | 20 | 8.745 2925 | 3778 | 8.745 9655 | 3789  | 1.254 0345 | 9.999 3270 | 12 | 40 |    |
| 30 | 30 | 8.745 6703 | 3774 | 8.746 3444 | 3786  | 1.253 6556 | 9.999 3258 | 12 | 30 |    |
| 40 | 40 | 8.746 0477 | 3771 | 8.746 7230 | 3783  | 1.253 2770 | 9.999 3247 | 12 | 20 |    |
| 50 | 50 | 8.746 4248 | 3767 | 8.747 1013 | 3779  | 1.252 8987 | 9.999 3235 | 12 | 10 |    |
| 12 | o  | 8.746 8015 | 3765 | 8.747 4792 | 3777  | 1.252 5208 | 9.999 3223 | 12 | o  | 48 |
| 10 | 10 | 8.747 1780 | 3761 | 8.747 8569 | 3772  | 1.252 1431 | 9.999 3211 | 12 | 50 |    |
| 20 | 20 | 8.747 5541 | 3758 | 8.748 2341 | 3770  | 1.251 7659 | 9.999 3199 | 12 | 40 |    |
| 30 | 30 | 8.747 9299 | 3754 | 8.748 6111 | 3766  | 1.251 3889 | 9.999 3188 | 12 | 30 |    |
| 40 | 40 | 8.748 3053 | 3752 | 8.748 9877 | 3764  | 1.251 0123 | 9.999 3176 | 12 | 20 |    |
| 50 | 50 | 8.748 6805 | 3748 | 8.749 3641 | 3759  | 1.250 6359 | 9.999 3164 | 12 | 10 |    |
| 13 | o  | 8.749 0553 | 3744 | 8.749 7400 | 3757  | 1.250 2600 | 9.999 3152 | 12 | o  | 47 |
| 10 | 10 | 8.749 4297 | 3742 | 8.750 1157 | 3754  | 1.249 8843 | 9.999 3140 | 12 | 50 |    |
| 20 | 20 | 8.749 8039 | 3738 | 8.750 4911 | 3750  | 1.249 5089 | 9.999 3129 | 12 | 40 |    |
| 30 | 30 | 8.750 1777 | 3736 | 8.750 8661 | 3747  | 1.249 1339 | 9.999 3117 | 12 | 30 |    |
| 40 | 40 | 8.750 5513 | 3731 | 8.751 2408 | 3744  | 1.248 7592 | 9.999 3105 | 12 | 20 |    |
| 50 | 50 | 8.750 9244 | 3729 | 8.751 6152 | 3740  | 1.248 3848 | 9.999 3093 | 12 | 10 |    |
| 14 | o  | 8.751 2973 | 3726 | 8.751 9892 | 3737  | 1.248 0108 | 9.999 3081 | 12 | o  | 46 |
| 10 | 10 | 8.751 6699 | 3722 | 8.752 3629 | 3735  | 1.247 6371 | 9.999 3069 | 12 | 50 |    |
| 20 | 20 | 8.752 0421 | 3719 | 8.752 7364 | 3731  | 1.247 2636 | 9.999 3057 | 12 | 40 |    |
| 30 | 30 | 8.752 4140 | 3716 | 8.753 1095 | 3728  | 1.246 8905 | 9.999 3045 | 12 | 30 |    |
| 40 | 40 | 8.752 7856 | 3713 | 8.753 4823 | 3724  | 1.246 5177 | 9.999 3033 | 12 | 20 |    |
| 50 | 50 | 8.753 1569 | 3709 | 8.753 8547 | 3722  | 1.246 1453 | 9.999 3021 | 12 | 10 |    |
| 15 | o  | 8.753 5278 | 3706 | 8.754 2269 | 3718  | 1.245 7731 | 9.999 3009 | 12 | o  | 45 |
| 10 | 10 | 8.753 8984 | 3704 | 8.754 5987 | 3715  | 1.245 4013 | 9.999 2998 | 12 | 50 |    |
| 20 | 20 | 8.754 2688 | 3700 | 8.754 9702 | 3712  | 1.245 0298 | 9.999 2986 | 12 | 40 |    |
| 30 | 30 | 8.754 6388 | 3697 | 8.755 3414 | 3709  | 1.244 6586 | 9.999 2974 | 12 | 30 |    |
| 40 | 40 | 8.755 0085 | 3693 | 8.755 7123 | 3706  | 1.244 2877 | 9.999 2962 | 12 | 20 |    |
| 50 | 50 | 8.755 3778 | 3691 | 8.756 0829 | 3702  | 1.243 9171 | 9.999 2950 | 12 | 10 |    |
| 16 | o  | 8.755 7469 | 3687 | 8.756 4531 | 3700  | 1.243 5469 | 9.999 2938 | 12 | o  | 44 |
| 10 | 10 | 8.756 1156 | 3684 | 8.756 8231 | 3696  | 1.243 1769 | 9.999 2926 | 12 | 50 |    |
| 20 | 20 | 8.756 4840 | 3682 | 8.757 1927 | 3693  | 1.242 8073 | 9.999 2914 | 12 | 40 |    |
| 30 | 30 | 8.756 8522 | 3678 | 8.757 5620 | 3690  | 1.242 4380 | 9.999 2901 | 12 | 30 |    |
| 40 | 40 | 8.757 2200 | 3674 | 8.757 9310 | 3687  | 1.242 0690 | 9.999 2889 | 12 | 20 |    |
| 50 | 50 | 8.757 5874 | 3672 | 8.758 2997 | 3684  | 1.241 7003 | 9.999 2877 | 12 | 10 |    |
| 17 | o  | 8.757 9546 | 3669 | 8.758 6681 | 3681  | 1.241 3319 | 9.999 2865 | 12 | o  | 43 |
| 10 | 10 | 8.758 3215 | 3665 | 8.759 0362 | 3677  | 1.240 9638 | 9.999 2853 | 12 | 50 |    |
| 20 | 20 | 8.758 6880 | 3663 | 8.759 4039 | 3675  | 1.240 5961 | 9.999 2841 | 12 | 40 |    |
| 30 | 30 | 8.759 0543 | 3659 | 8.759 7714 | 3671  | 1.240 2286 | 9.999 2829 | 12 | 30 |    |
| 40 | 40 | 8.759 4202 | 3657 | 8.760 1385 | 3669  | 1.239 8613 | 9.999 2817 | 12 | 20 |    |
| 50 | 50 | 8.759 7859 | 3653 | 8.760 5054 | 3665  | 1.239 4946 | 9.999 2805 | 12 | 10 |    |
| 18 | o  | 8.760 1512 | 3650 | 8.760 8719 | 3662  | 1.239 1281 | 9.999 2793 | 12 | o  | 42 |
| 10 | 10 | 8.760 5162 | 3647 | 8.761 2381 | 3659  | 1.238 7619 | 9.999 2780 | 12 | 50 |    |
| 20 | 20 | 8.760 8809 | 3644 | 8.761 6040 | 3657  | 1.238 3960 | 9.999 2768 | 12 | 40 |    |
| 30 | 30 | 8.761 2453 | 3641 | 8.761 9697 | 3653  | 1.238 0303 | 9.999 2756 | 12 | 30 |    |
| 40 | 40 | 8.761 6094 | 3637 | 8.762 3350 | 3650  | 1.237 6650 | 9.999 2744 | 12 | 20 |    |
| 50 | 50 | 8.761 9731 | 3635 | 8.762 7000 | 3647  | 1.237 3000 | 9.999 2732 | 12 | 10 |    |
| 19 | o  | 8.762 3366 | 3632 | 8.763 0647 | 3644  | 1.236 9353 | 9.999 2720 | 12 | o  | 41 |
| 10 | 10 | 8.762 6998 | 3629 | 8.763 4291 | 3640  | 1.236 5709 | 9.999 2707 | 12 | 50 |    |
| 20 | 20 | 8.763 0627 | 3625 | 8.763 7931 | 3638  | 1.236 2069 | 9.999 2695 | 12 | 40 |    |
| 30 | 30 | 8.763 4252 | 3623 | 8.764 1569 | 3635  | 1.235 8431 | 9.999 2683 | 12 | 30 |    |
| 40 | 40 | 8.763 7875 | 3619 | 8.764 5204 | 3632  | 1.235 4796 | 9.999 2671 | 12 | 20 |    |
| 50 | 50 | 8.764 1494 | 3617 | 8.764 8836 | 3629  | 1.235 1164 | 9.999 2658 | 12 | 10 |    |
| 20 | o  | 8.764 5111 |      | 8.765 2465 |       | 1.234 7535 | 9.999 2646 | 12 | o  | 40 |
|    | "  | Cos        | d.   | Cotg       | d.    | Tang       | Sin        | d. | "  |    |



|    |    | Sin        | d.   | Tang       | d. c. | Cotg       | Cos        | d. |    |    |
|----|----|------------|------|------------|-------|------------|------------|----|----|----|
| 20 | 0  | 8.764 5111 |      | 8.765 2465 | 3626  | 1.234 7535 | 9.999 2646 | 12 | 0  | 40 |
|    | 10 | 8.764 8724 | 3613 | 8.765 6091 | 3622  | 1.234 3909 | 9.999 2634 | 12 | 50 |    |
|    | 20 | 8.765 2335 | 3608 | 8.765 9713 | 3620  | 1.234 0287 | 9.999 2622 | 13 | 40 |    |
|    | 30 | 8.765 5943 | 3604 | 8.766 3333 | 3617  | 1.233 6667 | 9.999 2609 | 13 | 30 |    |
|    | 40 | 8.765 9547 | 3602 | 8.766 6950 | 3614  | 1.233 3050 | 9.999 2597 | 12 | 20 |    |
|    | 50 | 8.766 3149 | 3598 | 8.767 0564 | 3611  | 1.232 9436 | 9.999 2585 | 12 | 10 |    |
| 21 | 0  | 8.766 6747 | 3596 | 8.767 4175 | 3607  | 1.232 5825 | 9.999 2572 | 12 | 0  | 39 |
|    | 10 | 8.767 0343 | 3592 | 8.767 7782 | 3605  | 1.232 2218 | 9.999 2560 | 12 | 50 |    |
|    | 20 | 8.767 3935 | 3590 | 8.768 1387 | 3602  | 1.231 8613 | 9.999 2548 | 12 | 40 |    |
|    | 30 | 8.767 7525 | 3586 | 8.768 4989 | 3599  | 1.231 5011 | 9.999 2535 | 13 | 30 |    |
|    | 40 | 8.768 1111 | 3584 | 8.768 8588 | 3596  | 1.231 1412 | 9.999 2523 | 12 | 20 |    |
|    | 50 | 8.768 4695 | 3580 | 8.769 2184 | 3593  | 1.230 7816 | 9.999 2511 | 12 | 10 |    |
| 22 | 0  | 8.768 8275 | 3578 | 8.769 5777 | 3590  | 1.230 4223 | 9.999 2498 | 12 | 0  | 38 |
|    | 10 | 8.769 1853 | 3575 | 8.769 9367 | 3587  | 1.230 0633 | 9.999 2486 | 12 | 50 |    |
|    | 20 | 8.769 5428 | 3572 | 8.770 2954 | 3585  | 1.229 7046 | 9.999 2474 | 12 | 40 |    |
|    | 30 | 8.769 9000 | 3568 | 8.770 6539 | 3581  | 1.229 3461 | 9.999 2461 | 12 | 30 |    |
|    | 40 | 8.770 2568 | 3566 | 8.771 0120 | 3578  | 1.228 9880 | 9.999 2449 | 12 | 20 |    |
|    | 50 | 8.770 6134 | 3563 | 8.771 3698 | 3576  | 1.228 6302 | 9.999 2436 | 12 | 10 |    |
| 23 | 0  | 8.770 9697 | 3560 | 8.771 7274 | 3572  | 1.228 2726 | 9.999 2424 | 13 | 0  | 37 |
|    | 10 | 8.771 3257 | 3557 | 8.772 0846 | 3570  | 1.227 9154 | 9.999 2411 | 13 | 50 |    |
|    | 20 | 8.771 6814 | 3555 | 8.772 4416 | 3566  | 1.227 5584 | 9.999 2399 | 12 | 40 |    |
|    | 30 | 8.772 0369 | 3551 | 8.772 7982 | 3564  | 1.227 2018 | 9.999 2386 | 12 | 30 |    |
|    | 40 | 8.772 3920 | 3548 | 8.773 1546 | 3561  | 1.226 8454 | 9.999 2374 | 12 | 20 |    |
|    | 50 | 8.772 7468 | 3546 | 8.773 5107 | 3558  | 1.226 4893 | 9.999 2361 | 12 | 10 |    |
| 24 | 0  | 8.773 1014 | 3542 | 8.773 8665 | 3555  | 1.226 1335 | 9.999 2349 | 13 | 0  | 36 |
|    | 10 | 8.773 4556 | 3540 | 8.774 2220 | 3552  | 1.225 7780 | 9.999 2336 | 12 | 50 |    |
|    | 20 | 8.773 8096 | 3537 | 8.774 5772 | 3549  | 1.225 4228 | 9.999 2324 | 12 | 40 |    |
|    | 30 | 8.774 1633 | 3533 | 8.774 9321 | 3547  | 1.225 0679 | 9.999 2311 | 12 | 30 |    |
|    | 40 | 8.774 5166 | 3531 | 8.775 2868 | 3543  | 1.224 7132 | 9.999 2299 | 12 | 20 |    |
|    | 50 | 8.774 8697 | 3529 | 8.775 6411 | 3541  | 1.224 3589 | 9.999 2286 | 12 | 10 |    |
| 25 | 0  | 8.775 2226 | 3525 | 8.775 9952 | 3538  | 1.224 0048 | 9.999 2274 | 13 | 0  | 35 |
|    | 10 | 8.775 5751 | 3522 | 8.776 3490 | 3535  | 1.223 6510 | 9.999 2261 | 12 | 50 |    |
|    | 20 | 8.775 9273 | 3520 | 8.776 7025 | 3532  | 1.223 2975 | 9.999 2249 | 13 | 40 |    |
|    | 30 | 8.776 2793 | 3516 | 8.777 0557 | 3529  | 1.222 9443 | 9.999 2236 | 13 | 30 |    |
|    | 40 | 8.776 6309 | 3514 | 8.777 4086 | 3526  | 1.222 5914 | 9.999 2223 | 12 | 20 |    |
|    | 50 | 8.776 9823 | 3511 | 8.777 7612 | 3524  | 1.222 2388 | 9.999 2211 | 12 | 10 |    |
| 26 | 0  | 8.777 3334 | 3508 | 8.778 1136 | 3521  | 1.221 8864 | 9.999 2198 | 13 | 0  | 34 |
|    | 10 | 8.777 6842 | 3505 | 8.778 4657 | 3518  | 1.221 5343 | 9.999 2185 | 12 | 50 |    |
|    | 20 | 8.778 0347 | 3503 | 8.778 8175 | 3515  | 1.221 1825 | 9.999 2173 | 12 | 40 |    |
|    | 30 | 8.778 3850 | 3499 | 8.779 1690 | 3512  | 1.220 8310 | 9.999 2160 | 13 | 30 |    |
|    | 40 | 8.778 7349 | 3497 | 8.779 5202 | 3509  | 1.220 4798 | 9.999 2147 | 12 | 20 |    |
|    | 50 | 8.779 0846 | 3494 | 8.779 8711 | 3507  | 1.220 1289 | 9.999 2135 | 12 | 10 |    |
| 27 | 0  | 8.779 4340 | 3491 | 8.780 2218 | 3504  | 1.219 7782 | 9.999 2122 | 13 | 0  | 33 |
|    | 10 | 8.779 7831 | 3488 | 8.780 5722 | 3501  | 1.219 4278 | 9.999 2109 | 12 | 50 |    |
|    | 20 | 8.780 1319 | 3486 | 8.780 9223 | 3498  | 1.219 0777 | 9.999 2097 | 12 | 40 |    |
|    | 30 | 8.780 4805 | 3482 | 8.781 2721 | 3495  | 1.218 7279 | 9.999 2084 | 13 | 30 |    |
|    | 40 | 8.780 8287 | 3480 | 8.781 6216 | 3493  | 1.218 3784 | 9.999 2071 | 12 | 20 |    |
|    | 50 | 8.781 1767 | 3477 | 8.781 9709 | 3490  | 1.218 0291 | 9.999 2059 | 13 | 10 |    |
| 28 | 0  | 8.781 5244 | 3475 | 8.782 3199 | 3487  | 1.217 6801 | 9.999 2046 | 13 | 0  | 32 |
|    | 10 | 8.781 8719 | 3471 | 8.782 6686 | 3484  | 1.217 3314 | 9.999 2033 | 13 | 50 |    |
|    | 20 | 8.782 2190 | 3469 | 8.783 0170 | 3481  | 1.216 9830 | 9.999 2020 | 13 | 40 |    |
|    | 30 | 8.782 5659 | 3466 | 8.783 3651 | 3479  | 1.216 6349 | 9.999 2007 | 12 | 30 |    |
|    | 40 | 8.782 9125 | 3463 | 8.783 7130 | 3476  | 1.216 2870 | 9.999 1995 | 12 | 20 |    |
|    | 50 | 8.783 2588 | 3460 | 8.784 0606 | 3473  | 1.215 9394 | 9.999 1982 | 13 | 10 |    |
| 29 | 0  | 8.783 6048 | 3458 | 8.784 4079 | 3471  | 1.215 5921 | 9.999 1969 | 13 | 0  | 31 |
|    | 10 | 8.783 9506 | 3455 | 8.784 7550 | 3467  | 1.215 2450 | 9.999 1956 | 13 | 50 |    |
|    | 20 | 8.784 2961 | 3452 | 8.785 1017 | 3465  | 1.214 8983 | 9.999 1943 | 12 | 40 |    |
|    | 30 | 8.784 6413 | 3449 | 8.785 4482 | 3463  | 1.214 5518 | 9.999 1931 | 12 | 30 |    |
|    | 40 | 8.784 9862 | 3447 | 8.785 7945 | 3459  | 1.214 2055 | 9.999 1918 | 13 | 20 |    |
|    | 50 | 8.785 3309 | 3444 | 8.786 1404 | 3457  | 1.213 8596 | 9.999 1905 | 13 | 10 |    |
| 30 | 0  | 8.785 6753 | 3444 | 8.786 4861 | 3457  | 1.213 5139 | 9.999 1892 | 13 | 0  | 30 |
|    |    | Cos        | d.   | Cotg       | d.    | Tang       | Sin        | d. |    |    |



|    | "  | Sin        | d.   | Tang       | d. c. | Cotg       | Cos        | d. | "  |    |
|----|----|------------|------|------------|-------|------------|------------|----|----|----|
| 30 | 0  | 8.785 6753 | 3441 | 8.786 4861 | 3454  | 1.213 5139 | 9.999 1892 | 13 | 0  | 30 |
|    | 10 | 8.786 0194 | 3438 | 8.786 8315 | 3451  | 1.213 1685 | 9.999 1879 | 13 | 50 |    |
|    | 20 | 8.786 3632 | 3436 | 8.787 1766 | 3449  | 1.212 8234 | 9.999 1866 | 13 | 40 |    |
|    | 30 | 8.786 7068 | 3433 | 8.787 5215 | 3446  | 1.212 4785 | 9.999 1853 | 13 | 30 |    |
|    | 40 | 8.787 0501 | 3430 | 8.787 8661 | 3443  | 1.212 1339 | 9.999 1840 | 13 | 20 |    |
|    | 50 | 8.787 3931 | 3428 | 8.788 2104 | 3440  | 1.211 7896 | 9.999 1827 | 12 | 10 |    |
| 31 | 0  | 8.787 7359 | 3424 | 8.788 5544 | 3438  | 1.211 4456 | 9.999 1815 | 13 | 0  | 29 |
|    | 10 | 8.788 0783 | 3422 | 8.788 8982 | 3435  | 1.211 1018 | 9.999 1802 | 13 | 50 |    |
|    | 20 | 8.788 4205 | 3420 | 8.789 2417 | 3432  | 1.210 7583 | 9.999 1789 | 13 | 40 |    |
|    | 30 | 8.788 7625 | 3416 | 8.789 5849 | 3430  | 1.210 4151 | 9.999 1776 | 13 | 30 |    |
|    | 40 | 8.789 1041 | 3414 | 8.789 9279 | 3427  | 1.210 0721 | 9.999 1763 | 13 | 20 |    |
|    | 50 | 8.789 4455 | 3412 | 8.790 2706 | 3424  | 1.209 7294 | 9.999 1750 | 13 | 10 |    |
| 32 | 0  | 8.789 7867 | 3408 | 8.790 6130 | 3422  | 1.209 3870 | 9.999 1737 | 13 | 0  | 28 |
|    | 10 | 8.790 1275 | 3406 | 8.790 9552 | 3419  | 1.209 0448 | 9.999 1724 | 13 | 50 |    |
|    | 20 | 8.790 4681 | 3403 | 8.791 2971 | 3416  | 1.208 7029 | 9.999 1711 | 13 | 40 |    |
|    | 30 | 8.790 8084 | 3401 | 8.791 6387 | 3413  | 1.208 3613 | 9.999 1698 | 13 | 30 |    |
|    | 40 | 8.791 1485 | 3398 | 8.791 9800 | 3411  | 1.208 0200 | 9.999 1685 | 13 | 20 |    |
|    | 50 | 8.791 4883 | 3395 | 8.792 3211 | 3409  | 1.207 6789 | 9.999 1672 | 13 | 10 |    |
| 33 | 0  | 8.791 8278 | 3393 | 8.792 6620 | 3405  | 1.207 3380 | 9.999 1659 | 14 | 0  | 27 |
|    | 10 | 8.792 1671 | 3390 | 8.793 0025 | 3403  | 1.206 9975 | 9.999 1645 | 13 | 50 |    |
|    | 20 | 8.792 5061 | 3387 | 8.793 3428 | 3401  | 1.206 6572 | 9.999 1632 | 13 | 40 |    |
|    | 30 | 8.792 8448 | 3384 | 8.793 6829 | 3397  | 1.206 3171 | 9.999 1619 | 13 | 30 |    |
|    | 40 | 8.793 1832 | 3382 | 8.794 0226 | 3395  | 1.205 9774 | 9.999 1606 | 13 | 20 |    |
|    | 50 | 8.793 5214 | 3380 | 8.794 3621 | 3393  | 1.205 6379 | 9.999 1593 | 13 | 10 |    |
| 34 | 0  | 8.793 8594 | 3376 | 8.794 7014 | 3390  | 1.205 2986 | 9.999 1580 | 13 | 0  | 26 |
|    | 10 | 8.794 1970 | 3374 | 8.795 0404 | 3387  | 1.204 9596 | 9.999 1567 | 13 | 50 |    |
|    | 20 | 8.794 5344 | 3372 | 8.795 3791 | 3384  | 1.204 6209 | 9.999 1554 | 13 | 40 |    |
|    | 30 | 8.794 8716 | 3369 | 8.795 7175 | 3382  | 1.204 2825 | 9.999 1541 | 14 | 30 |    |
|    | 40 | 8.795 2085 | 3366 | 8.796 0557 | 3380  | 1.203 9443 | 9.999 1527 | 13 | 20 |    |
|    | 50 | 8.795 5451 | 3363 | 8.796 3937 | 3376  | 1.203 6063 | 9.999 1514 | 13 | 10 |    |
| 35 | 0  | 8.795 8814 | 3361 | 8.796 7313 | 3374  | 1.203 2687 | 9.999 1501 | 13 | 0  | 25 |
|    | 10 | 8.796 2175 | 3359 | 8.797 0687 | 3372  | 1.202 9313 | 9.999 1488 | 13 | 50 |    |
|    | 20 | 8.796 5534 | 3355 | 8.797 4059 | 3369  | 1.202 5941 | 9.999 1475 | 14 | 40 |    |
|    | 30 | 8.796 8889 | 3353 | 8.797 7428 | 3366  | 1.202 2572 | 9.999 1461 | 13 | 30 |    |
|    | 40 | 8.797 2242 | 3351 | 8.798 0794 | 3364  | 1.201 9206 | 9.999 1448 | 13 | 20 |    |
|    | 50 | 8.797 5593 | 3348 | 8.798 4158 | 3361  | 1.201 5842 | 9.999 1435 | 13 | 10 |    |
| 36 | 0  | 8.797 8941 | 3345 | 8.798 7519 | 3359  | 1.201 2481 | 9.999 1422 | 14 | 0  | 24 |
|    | 10 | 8.798 2286 | 3343 | 8.799 0878 | 3356  | 1.200 9122 | 9.999 1408 | 13 | 50 |    |
|    | 20 | 8.798 5629 | 3340 | 8.799 4234 | 3353  | 1.200 5766 | 9.999 1395 | 13 | 40 |    |
|    | 30 | 8.798 8969 | 3338 | 8.799 7587 | 3351  | 1.200 2413 | 9.999 1382 | 13 | 30 |    |
|    | 40 | 8.799 2307 | 3335 | 8.800 0938 | 3348  | 1.199 9062 | 9.999 1369 | 14 | 20 |    |
|    | 50 | 8.799 5642 | 3332 | 8.800 4286 | 3346  | 1.199 5714 | 9.999 1355 | 13 | 10 |    |
| 37 | 0  | 8.799 8974 | 3330 | 8.800 7632 | 3343  | 1.199 2368 | 9.999 1342 | 13 | 0  | 23 |
|    | 10 | 8.800 2304 | 3327 | 8.801 0975 | 3341  | 1.198 9025 | 9.999 1329 | 14 | 50 |    |
|    | 20 | 8.800 5631 | 3325 | 8.801 4316 | 3338  | 1.198 5684 | 9.999 1315 | 13 | 40 |    |
|    | 30 | 8.800 8956 | 3322 | 8.801 7654 | 3335  | 1.198 2346 | 9.999 1302 | 13 | 30 |    |
|    | 40 | 8.801 2278 | 3320 | 8.802 0989 | 3334  | 1.197 9011 | 9.999 1289 | 14 | 20 |    |
|    | 50 | 8.801 5598 | 3317 | 8.802 4323 | 3330  | 1.197 5677 | 9.999 1275 | 13 | 10 |    |
| 38 | 0  | 8.801 8915 | 3315 | 8.802 7653 | 3328  | 1.197 2347 | 9.999 1262 | 13 | 0  | 22 |
|    | 10 | 8.802 2230 | 3312 | 8.803 0981 | 3325  | 1.196 9019 | 9.999 1249 | 14 | 50 |    |
|    | 20 | 8.802 5542 | 3309 | 8.803 4306 | 3323  | 1.196 5694 | 9.999 1235 | 13 | 40 |    |
|    | 30 | 8.802 8851 | 3307 | 8.803 7629 | 3321  | 1.196 2371 | 9.999 1222 | 14 | 30 |    |
|    | 40 | 8.803 2158 | 3305 | 8.804 0950 | 3317  | 1.195 9050 | 9.999 1208 | 13 | 20 |    |
|    | 50 | 8.803 5463 | 3301 | 8.804 4267 | 3316  | 1.195 5733 | 9.999 1195 | 13 | 10 |    |
| 39 | 0  | 8.803 8764 | 3300 | 8.804 7583 | 3313  | 1.195 2417 | 9.999 1182 | 14 | 0  | 21 |
|    | 10 | 8.804 2064 | 3297 | 8.805 0896 | 3310  | 1.194 9104 | 9.999 1168 | 13 | 50 |    |
|    | 20 | 8.804 5361 | 3294 | 8.805 4206 | 3308  | 1.194 5794 | 9.999 1155 | 14 | 40 |    |
|    | 30 | 8.804 8655 | 3292 | 8.805 7514 | 3305  | 1.194 2486 | 9.999 1141 | 13 | 30 |    |
|    | 40 | 8.805 1947 | 3289 | 8.806 0819 | 3303  | 1.193 9181 | 9.999 1128 | 14 | 20 |    |
|    | 50 | 8.805 5236 | 3287 | 8.806 4122 | 3300  | 1.193 5878 | 9.999 1114 | 13 | 10 |    |
| 40 | 0  | 8.805 8523 |      | 8.806 7422 |       | 1.193 2578 | 9.999 1101 |    | 0  | 20 |
|    |    | Cos        | d.   | Cotg       | d.    | Tang       | Sin        | d. | "  |    |



|    |    | Sin        | d.   | Tang       | d. c. | Cotg       | Cos        | d. |    |    |
|----|----|------------|------|------------|-------|------------|------------|----|----|----|
| 40 | 0  | 8.805 8523 | 3285 | 8.806 7422 | 3298  | 1.193 2578 | 9.999 1101 | 14 | 0  | 20 |
|    | 10 | 8.806 1808 | 3281 | 8.807 0720 | 3296  | 1.192 9280 | 9.999 1087 | 13 | 50 |    |
|    | 20 | 8.806 5089 | 3280 | 8.807 4016 | 3293  | 1.192 5984 | 9.999 1074 | 14 | 40 |    |
|    | 30 | 8.806 8369 | 3277 | 8.807 7309 | 3290  | 1.192 2691 | 9.999 1060 | 13 | 30 |    |
|    | 40 | 8.807 1646 | 3274 | 8.808 0599 | 3288  | 1.191 9401 | 9.999 1047 | 13 | 20 |    |
|    | 50 | 8.807 4920 | 3272 | 8.808 3887 | 3285  | 1.191 6113 | 9.999 1033 | 14 | 10 |    |
| 41 | 0  | 8.807 8192 | 3270 | 8.808 7172 | 3283  | 1.191 2828 | 9.999 1020 | 14 | 0  | 19 |
|    | 10 | 8.808 1462 | 3267 | 8.809 0455 | 3281  | 1.190 9545 | 9.999 1006 | 13 | 50 |    |
|    | 20 | 8.808 4729 | 3264 | 8.809 3736 | 3278  | 1.190 6264 | 9.999 0993 | 14 | 40 |    |
|    | 30 | 8.808 7993 | 3262 | 8.809 7014 | 3276  | 1.190 2986 | 9.999 0979 | 14 | 30 |    |
|    | 40 | 8.809 1255 | 3260 | 8.810 0290 | 3273  | 1.189 9710 | 9.999 0965 | 13 | 20 |    |
|    | 50 | 8.809 4515 | 3257 | 8.810 3563 | 3271  | 1.189 6437 | 9.999 0952 | 14 | 10 |    |
| 42 | 0  | 8.809 7772 | 3255 | 8.810 6834 | 3268  | 1.189 3166 | 9.999 0938 | 13 | 0  | 18 |
|    | 10 | 8.810 1027 | 3252 | 8.811 0102 | 3266  | 1.188 9898 | 9.999 0925 | 14 | 50 |    |
|    | 20 | 8.810 4279 | 3250 | 8.811 3368 | 3263  | 1.188 6632 | 9.999 0911 | 14 | 40 |    |
|    | 30 | 8.810 7529 | 3247 | 8.811 6631 | 3262  | 1.188 3369 | 9.999 0897 | 14 | 30 |    |
|    | 40 | 8.811 0776 | 3245 | 8.811 9893 | 3258  | 1.188 0107 | 9.999 0884 | 13 | 20 |    |
|    | 50 | 8.811 4021 | 3243 | 8.812 3151 | 3256  | 1.187 6849 | 9.999 0870 | 14 | 10 |    |
| 43 | 0  | 8.811 7264 | 3240 | 8.812 6407 | 3254  | 1.187 3593 | 9.999 0856 | 13 | 0  | 17 |
|    | 10 | 8.812 0504 | 3237 | 8.812 9661 | 3251  | 1.187 0339 | 9.999 0843 | 14 | 50 |    |
|    | 20 | 8.812 3741 | 3236 | 8.813 2912 | 3249  | 1.186 7088 | 9.999 0829 | 14 | 40 |    |
|    | 30 | 8.812 6977 | 3232 | 8.813 6161 | 3247  | 1.186 3839 | 9.999 0815 | 13 | 30 |    |
|    | 40 | 8.813 0209 | 3231 | 8.813 9408 | 3244  | 1.186 0592 | 9.999 0802 | 14 | 20 |    |
|    | 50 | 8.813 3440 | 3228 | 8.814 2652 | 3242  | 1.185 7348 | 9.999 0788 | 14 | 10 |    |
| 44 | 0  | 8.813 6668 | 3225 | 8.814 5894 | 3239  | 1.185 4106 | 9.999 0774 | 14 | 0  | 16 |
|    | 10 | 8.813 9893 | 3224 | 8.814 9133 | 3237  | 1.185 0867 | 9.999 0760 | 13 | 50 |    |
|    | 20 | 8.814 3117 | 3220 | 8.815 2370 | 3235  | 1.184 7630 | 9.999 0747 | 14 | 40 |    |
|    | 30 | 8.814 6337 | 3219 | 8.815 5605 | 3232  | 1.184 4395 | 9.999 0733 | 14 | 30 |    |
|    | 40 | 8.814 9556 | 3216 | 8.815 8837 | 3229  | 1.184 1163 | 9.999 0719 | 14 | 20 |    |
|    | 50 | 8.815 2772 | 3213 | 8.816 2066 | 3228  | 1.183 7934 | 9.999 0705 | 14 | 10 |    |
| 45 | 0  | 8.815 5985 | 3211 | 8.816 5294 | 3225  | 1.183 4706 | 9.999 0691 | 13 | 0  | 15 |
|    | 10 | 8.815 9196 | 3209 | 8.816 8519 | 3222  | 1.183 1481 | 9.999 0678 | 14 | 50 |    |
|    | 20 | 8.816 2405 | 3207 | 8.817 1741 | 3221  | 1.182 8259 | 9.999 0664 | 14 | 40 |    |
|    | 30 | 8.816 5612 | 3204 | 8.817 4962 | 3218  | 1.182 5038 | 9.999 0650 | 14 | 30 |    |
|    | 40 | 8.816 8816 | 3202 | 8.817 8180 | 3215  | 1.182 1820 | 9.999 0636 | 14 | 20 |    |
|    | 50 | 8.817 2018 | 3199 | 8.818 1395 | 3213  | 1.181 8605 | 9.999 0622 | 14 | 10 |    |
| 46 | 0  | 8.817 5217 | 3197 | 8.818 4608 | 3211  | 1.181 5392 | 9.999 0608 | 13 | 0  | 14 |
|    | 10 | 8.817 8414 | 3194 | 8.818 7819 | 3209  | 1.181 2181 | 9.999 0595 | 14 | 50 |    |
|    | 20 | 8.818 1608 | 3193 | 8.819 1028 | 3206  | 1.180 8972 | 9.999 0581 | 14 | 40 |    |
|    | 30 | 8.818 4801 | 3190 | 8.819 4234 | 3204  | 1.180 5766 | 9.999 0567 | 14 | 30 |    |
|    | 40 | 8.818 7991 | 3187 | 8.819 7438 | 3201  | 1.180 2562 | 9.999 0553 | 14 | 20 |    |
|    | 50 | 8.819 1178 | 3185 | 8.820 0639 | 3199  | 1.179 9361 | 9.999 0539 | 14 | 10 |    |
| 47 | 0  | 8.819 4363 | 3183 | 8.820 3838 | 3197  | 1.179 6162 | 9.999 0525 | 14 | 0  | 13 |
|    | 10 | 8.819 7546 | 3181 | 8.820 7035 | 3194  | 1.179 2965 | 9.999 0511 | 14 | 50 |    |
|    | 20 | 8.820 0727 | 3178 | 8.821 0229 | 3193  | 1.178 9771 | 9.999 0497 | 14 | 40 |    |
|    | 30 | 8.820 3905 | 3176 | 8.821 3422 | 3189  | 1.178 6578 | 9.999 0483 | 14 | 30 |    |
|    | 40 | 8.820 7081 | 3173 | 8.821 6611 | 3188  | 1.178 3389 | 9.999 0469 | 14 | 20 |    |
|    | 50 | 8.821 0254 | 3171 | 8.821 9799 | 3185  | 1.178 0201 | 9.999 0455 | 14 | 10 |    |
| 48 | 0  | 8.821 3425 | 3169 | 8.822 2984 | 3183  | 1.177 7016 | 9.999 0441 | 14 | 0  | 12 |
|    | 10 | 8.821 6594 | 3167 | 8.822 6167 | 3180  | 1.177 3833 | 9.999 0427 | 14 | 50 |    |
|    | 20 | 8.821 9761 | 3164 | 8.822 9347 | 3179  | 1.177 0653 | 9.999 0413 | 14 | 40 |    |
|    | 30 | 8.822 2925 | 3162 | 8.823 2526 | 3175  | 1.176 7474 | 9.999 0399 | 14 | 30 |    |
|    | 40 | 8.822 6087 | 3159 | 8.823 5701 | 3174  | 1.176 4299 | 9.999 0385 | 14 | 20 |    |
|    | 50 | 8.822 9246 | 3158 | 8.823 8875 | 3171  | 1.176 1125 | 9.999 0371 | 14 | 10 |    |
| 49 | 0  | 8.823 2404 | 3155 | 8.824 2046 | 3169  | 1.175 7954 | 9.999 0357 | 14 | 0  | 11 |
|    | 10 | 8.823 5559 | 3152 | 8.824 5215 | 3167  | 1.175 4785 | 9.999 0343 | 14 | 50 |    |
|    | 20 | 8.823 8711 | 3151 | 8.824 8382 | 3165  | 1.175 1618 | 9.999 0329 | 14 | 40 |    |
|    | 30 | 8.824 1862 | 3148 | 8.825 1547 | 3162  | 1.174 8453 | 9.999 0315 | 14 | 30 |    |
|    | 40 | 8.824 5010 | 3146 | 8.825 4709 | 3160  | 1.174 5291 | 9.999 0301 | 14 | 20 |    |
|    | 50 | 8.824 8156 | 3143 | 8.825 7869 | 3157  | 1.174 2131 | 9.999 0287 | 14 | 10 |    |
| 50 | 0  | 8.825 1299 |      | 8.826 1026 |       | 1.173 8974 | 9.999 0273 | 14 | 0  | 10 |
|    |    | Cos        | d.   | Cotg       | d.    | Tang       | Sin        | d. |    |    |



| "  | Sin        | d.   | Tang       | d. c. | Cotg       | Cos        | d. | "  | "  |
|----|------------|------|------------|-------|------------|------------|----|----|----|
| 0  | 8.825 1299 | 3141 | 8.826 1026 | 3156  | 1.173 8974 | 9.999 0273 | 14 | 0  | 10 |
| 10 | 8.825 4440 | 3139 | 8.826 4182 | 3153  | 1.173 5818 | 9.999 0259 | 14 | 50 |    |
| 20 | 8.825 7579 | 3137 | 8.826 7335 | 3150  | 1.173 2665 | 9.999 0245 | 15 | 40 |    |
| 30 | 8.826 0716 | 3134 | 8.827 0485 | 3149  | 1.172 9515 | 9.999 0230 | 15 | 30 |    |
| 40 | 8.826 3850 | 3132 | 8.827 3634 | 3146  | 1.172 6366 | 9.999 0216 | 14 | 20 |    |
| 50 | 8.826 6982 | 3130 | 8.827 6780 | 3144  | 1.172 3220 | 9.999 0202 | 14 | 10 |    |
| 0  | 8.827 0112 | 3128 | 8.827 9924 | 3142  | 1.172 0076 | 9.999 0188 | 14 | 0  | 9  |
| 10 | 8.827 3240 | 3125 | 8.828 3066 | 3140  | 1.171 6934 | 9.999 0174 | 14 | 50 |    |
| 20 | 8.827 6365 | 3123 | 8.828 6206 | 3137  | 1.171 3794 | 9.999 0160 | 15 | 40 |    |
| 30 | 8.827 9488 | 3121 | 8.828 9343 | 3135  | 1.171 0657 | 9.999 0145 | 15 | 30 |    |
| 40 | 8.828 2609 | 3119 | 8.829 2478 | 3133  | 1.170 7522 | 9.999 0131 | 14 | 20 |    |
| 50 | 8.828 5728 | 3116 | 8.829 5611 | 3130  | 1.170 4389 | 9.999 0117 | 14 | 10 |    |
| 0  | 8.828 8844 | 3114 | 8.829 8741 | 3128  | 1.170 1259 | 9.999 0103 | 14 | 0  | 8  |
| 10 | 8.829 1958 | 3112 | 8.830 1869 | 3127  | 1.169 8131 | 9.999 0089 | 15 | 50 |    |
| 20 | 8.829 5070 | 3109 | 8.830 4996 | 3123  | 1.169 5004 | 9.999 0074 | 14 | 40 |    |
| 30 | 8.829 8179 | 3108 | 8.830 8119 | 3122  | 1.169 1881 | 9.999 0060 | 14 | 30 |    |
| 40 | 8.830 1287 | 3105 | 8.831 1241 | 3119  | 1.168 8759 | 9.999 0046 | 14 | 20 |    |
| 50 | 8.830 4392 | 3103 | 8.831 4360 | 3118  | 1.168 5640 | 9.999 0032 | 15 | 10 |    |
| 0  | 8.830 7495 | 3101 | 8.831 7478 | 3115  | 1.168 2522 | 9.999 0017 | 14 | 0  | 7  |
| 10 | 8.831 0596 | 3098 | 8.832 0593 | 3112  | 1.167 9407 | 9.999 0003 | 14 | 50 |    |
| 20 | 8.831 3694 | 3096 | 8.832 3705 | 3111  | 1.167 6295 | 9.998 9989 | 15 | 40 |    |
| 30 | 8.831 6790 | 3094 | 8.832 6816 | 3108  | 1.167 3184 | 9.998 9974 | 14 | 30 |    |
| 40 | 8.831 9884 | 3092 | 8.832 9924 | 3106  | 1.167 0076 | 9.998 9960 | 14 | 20 |    |
| 50 | 8.832 2976 | 3090 | 8.833 3030 | 3104  | 1.166 6970 | 9.998 9946 | 15 | 10 |    |
| 0  | 8.832 6066 | 3087 | 8.833 6134 | 3102  | 1.166 3866 | 9.998 9931 | 14 | 0  | 6  |
| 10 | 8.832 9153 | 3085 | 8.833 9236 | 3100  | 1.166 0764 | 9.998 9917 | 14 | 50 |    |
| 20 | 8.833 2238 | 3083 | 8.834 2336 | 3097  | 1.165 7664 | 9.998 9903 | 15 | 40 |    |
| 30 | 8.833 5321 | 3081 | 8.834 5433 | 3095  | 1.165 4567 | 9.998 9888 | 14 | 30 |    |
| 40 | 8.833 8402 | 3079 | 8.834 8528 | 3093  | 1.165 1472 | 9.998 9874 | 15 | 20 |    |
| 50 | 8.834 1481 | 3076 | 8.835 1621 | 3091  | 1.164 8379 | 9.998 9859 | 14 | 10 |    |
| 0  | 8.834 4557 | 3074 | 8.835 4712 | 3089  | 1.164 5288 | 9.998 9845 | 14 | 0  | 5  |
| 10 | 8.834 7631 | 3072 | 8.835 7801 | 3086  | 1.164 2199 | 9.998 9831 | 15 | 50 |    |
| 20 | 8.835 0703 | 3070 | 8.836 0887 | 3084  | 1.163 9113 | 9.998 9816 | 14 | 40 |    |
| 30 | 8.835 3773 | 3068 | 8.836 3971 | 3082  | 1.163 6029 | 9.998 9802 | 15 | 30 |    |
| 40 | 8.835 6841 | 3065 | 8.837 7053 | 3080  | 1.163 2947 | 9.998 9787 | 14 | 20 |    |
| 50 | 8.835 9906 | 3063 | 8.837 0133 | 3078  | 1.162 9867 | 9.998 9773 | 15 | 10 |    |
| 0  | 8.836 2969 | 3062 | 8.837 3211 | 3076  | 1.162 6789 | 9.998 9758 | 14 | 0  | 4  |
| 10 | 8.836 6031 | 3059 | 8.837 6287 | 3073  | 1.162 3713 | 9.998 9744 | 15 | 50 |    |
| 20 | 8.836 9090 | 3056 | 8.837 9360 | 3072  | 1.162 0640 | 9.998 9729 | 14 | 40 |    |
| 30 | 8.837 2146 | 3055 | 8.838 2432 | 3069  | 1.161 7568 | 9.998 9715 | 15 | 30 |    |
| 40 | 8.837 5201 | 3053 | 8.838 5501 | 3067  | 1.161 4499 | 9.998 9700 | 14 | 20 |    |
| 50 | 8.837 8254 | 3050 | 8.838 8568 | 3065  | 1.161 1432 | 9.998 9686 | 15 | 10 |    |
| 0  | 8.838 1304 | 3048 | 8.839 1633 | 3062  | 1.160 8367 | 9.998 9671 | 14 | 0  | 3  |
| 10 | 8.838 4352 | 3046 | 8.839 4695 | 3061  | 1.160 5305 | 9.998 9657 | 15 | 50 |    |
| 20 | 8.838 7398 | 3044 | 8.839 7756 | 3058  | 1.160 2244 | 9.998 9642 | 14 | 40 |    |
| 30 | 8.839 0442 | 3042 | 8.840 0814 | 3057  | 1.159 9186 | 9.998 9628 | 15 | 30 |    |
| 40 | 8.839 3484 | 3039 | 8.840 3871 | 3054  | 1.159 6129 | 9.998 9613 | 15 | 20 |    |
| 50 | 8.839 6523 | 3038 | 8.840 6925 | 3052  | 1.159 3075 | 9.998 9598 | 14 | 10 |    |
| 0  | 8.839 9561 | 3035 | 8.840 9977 | 3050  | 1.159 0023 | 9.998 9584 | 15 | 0  | 2  |
| 10 | 8.840 2596 | 3033 | 8.841 3027 | 3048  | 1.158 6973 | 9.998 9569 | 14 | 50 |    |
| 20 | 8.840 5629 | 3032 | 8.841 6075 | 3046  | 1.158 3925 | 9.998 9555 | 15 | 40 |    |
| 30 | 8.840 8661 | 3029 | 8.841 9121 | 3043  | 1.158 0879 | 9.998 9540 | 15 | 30 |    |
| 40 | 8.841 1690 | 3026 | 8.842 2164 | 3042  | 1.157 7836 | 9.998 9525 | 14 | 20 |    |
| 50 | 8.841 4716 | 3025 | 8.842 5206 | 3039  | 1.157 4794 | 9.998 9511 | 15 | 10 |    |
| 0  | 8.841 7741 | 3023 | 8.842 8245 | 3037  | 1.157 1755 | 9.998 9496 | 15 | 0  | 1  |
| 10 | 8.842 0764 | 3020 | 8.843 1282 | 3036  | 1.156 8718 | 9.998 9481 | 14 | 50 |    |
| 20 | 8.842 3784 | 3019 | 8.843 4318 | 3033  | 1.156 5682 | 9.998 9467 | 15 | 40 |    |
| 30 | 8.842 6803 | 3016 | 8.843 7351 | 3031  | 1.156 2649 | 9.998 9452 | 15 | 30 |    |
| 40 | 8.842 9819 | 3014 | 8.844 0382 | 3028  | 1.155 9618 | 9.998 9437 | 14 | 20 |    |
| 50 | 8.843 2833 | 3012 | 8.844 3410 | 3027  | 1.155 6590 | 9.998 9423 | 15 | 10 |    |
| 0  | 8.843 5845 |      | 8.844 6437 |       | 1.155 3563 | 9.998 9408 | 15 | 0  | 0  |

| " | Cos | d. | Cotg | d. | Tang | Sin | d. | " | " |
|---|-----|----|------|----|------|-----|----|---|---|
|---|-----|----|------|----|------|-----|----|---|---|



|    |    | Sin        | d.   | Tang       | d. c. | Cotg       | Cos        | d. |    |    |
|----|----|------------|------|------------|-------|------------|------------|----|----|----|
| 0  | 0  | 8.843 5845 | 3010 | 8.844 6427 | 3025  | 1.155 3563 | 9.998 9408 | 15 | 0  | 60 |
|    | 10 | 8.843 8855 | 3008 | 8.844 9462 | 3023  | 1.155 0538 | 9.998 9393 | 15 | 50 |    |
|    | 20 | 8.844 1863 | 3006 | 8.845 2485 | 3020  | 1.154 7515 | 9.998 9378 | 15 | 40 |    |
|    | 30 | 8.844 4869 | 3004 | 8.845 5505 | 3019  | 1.154 4495 | 9.998 9364 | 15 | 30 |    |
|    | 40 | 8.844 7873 | 3001 | 8.845 8524 | 3016  | 1.154 1476 | 9.998 9349 | 15 | 20 |    |
|    | 50 | 8.845 0874 | 3000 | 8.846 1540 | 3014  | 1.153 8460 | 9.998 9334 | 15 | 10 |    |
| 1  | 0  | 8.845 3874 | 2997 | 8.846 4554 | 3013  | 1.153 5446 | 9.998 9319 | 14 | 0  | 59 |
|    | 10 | 8.845 6871 | 2996 | 8.846 7567 | 3010  | 1.153 2433 | 9.998 9305 | 15 | 50 |    |
|    | 20 | 8.845 9867 | 2993 | 8.847 0577 | 3008  | 1.152 9423 | 9.998 9290 | 15 | 40 |    |
|    | 30 | 8.846 2860 | 2991 | 8.847 3585 | 3006  | 1.152 6415 | 9.998 9275 | 15 | 30 |    |
|    | 40 | 8.846 5851 | 2989 | 8.847 6591 | 3004  | 1.152 3409 | 9.998 9260 | 15 | 20 |    |
|    | 50 | 8.846 8840 | 2987 | 8.847 9595 | 3002  | 1.152 0405 | 9.998 9245 | 15 | 10 |    |
| 2  | 0  | 8.847 1827 | 2985 | 8.848 2597 | 3000  | 1.151 7403 | 9.998 9230 | 14 | 0  | 58 |
|    | 10 | 8.847 4812 | 2983 | 8.848 5597 | 2998  | 1.151 4403 | 9.998 9216 | 15 | 50 |    |
|    | 20 | 8.847 7795 | 2981 | 8.848 8595 | 2995  | 1.151 1405 | 9.998 9201 | 15 | 40 |    |
|    | 30 | 8.848 0776 | 2979 | 8.849 1590 | 2994  | 1.150 8410 | 9.998 9186 | 15 | 30 |    |
|    | 40 | 8.848 3755 | 2977 | 8.849 4584 | 2992  | 1.150 5416 | 9.998 9171 | 15 | 20 |    |
|    | 50 | 8.848 6732 | 2975 | 8.849 7576 | 2990  | 1.150 2424 | 9.998 9156 | 15 | 10 |    |
| 3  | 0  | 8.848 9707 | 2972 | 8.850 0566 | 2987  | 1.149 9434 | 9.998 9141 | 15 | 0  | 57 |
|    | 10 | 8.849 2679 | 2971 | 8.850 3553 | 2986  | 1.149 6447 | 9.998 9126 | 15 | 50 |    |
|    | 20 | 8.849 5650 | 2969 | 8.850 6539 | 2983  | 1.149 3461 | 9.998 9111 | 15 | 40 |    |
|    | 30 | 8.849 8619 | 2966 | 8.850 9522 | 2982  | 1.149 0478 | 9.998 9096 | 14 | 30 |    |
|    | 40 | 8.850 1585 | 2965 | 8.851 2504 | 2979  | 1.148 7496 | 9.998 9082 | 15 | 20 |    |
|    | 50 | 8.850 4550 | 2962 | 8.851 5483 | 2978  | 1.148 4517 | 9.998 9067 | 15 | 10 |    |
| 4  | 0  | 8.850 7512 | 2961 | 8.851 8461 | 2975  | 1.148 1539 | 9.998 9052 | 15 | 0  | 56 |
|    | 10 | 8.851 0473 | 2958 | 8.852 1436 | 2974  | 1.147 8564 | 9.998 9037 | 15 | 50 |    |
|    | 20 | 8.851 3431 | 2957 | 8.852 4410 | 2971  | 1.147 5590 | 9.998 9022 | 15 | 40 |    |
|    | 30 | 8.851 6388 | 2954 | 8.852 7381 | 2970  | 1.147 2619 | 9.998 9007 | 15 | 30 |    |
|    | 40 | 8.851 9341 | 2953 | 8.853 0351 | 2967  | 1.146 9649 | 9.998 8992 | 15 | 20 |    |
|    | 50 | 8.852 2295 | 2950 | 8.853 3318 | 2965  | 1.146 6682 | 9.998 8977 | 15 | 10 |    |
| 5  | 0  | 8.852 5245 | 2948 | 8.853 6283 | 2964  | 1.146 3717 | 9.998 8962 | 15 | 0  | 55 |
|    | 10 | 8.852 8193 | 2947 | 8.853 9247 | 2961  | 1.146 0753 | 9.998 8947 | 15 | 50 |    |
|    | 20 | 8.853 1140 | 2944 | 8.854 2208 | 2960  | 1.145 7792 | 9.998 8932 | 16 | 40 |    |
|    | 30 | 8.853 4084 | 2942 | 8.854 5168 | 2957  | 1.145 4832 | 9.998 8916 | 15 | 30 |    |
|    | 40 | 8.853 7026 | 2941 | 8.854 8125 | 2956  | 1.145 1875 | 9.998 8901 | 15 | 20 |    |
|    | 50 | 8.853 9967 | 2938 | 8.855 1081 | 2953  | 1.144 8919 | 9.998 8886 | 15 | 10 |    |
| 6  | 0  | 8.854 2905 | 2937 | 8.855 4034 | 2951  | 1.144 5966 | 9.998 8871 | 15 | 0  | 54 |
|    | 10 | 8.854 5842 | 2934 | 8.855 6985 | 2950  | 1.144 3015 | 9.998 8856 | 15 | 50 |    |
|    | 20 | 8.854 8776 | 2932 | 8.855 9935 | 2947  | 1.144 0065 | 9.998 8841 | 15 | 40 |    |
|    | 30 | 8.855 1708 | 2931 | 8.856 2882 | 2946  | 1.143 7118 | 9.998 8826 | 15 | 30 |    |
|    | 40 | 8.855 4639 | 2928 | 8.856 5828 | 2943  | 1.143 4172 | 9.998 8811 | 15 | 20 |    |
|    | 50 | 8.855 7567 | 2926 | 8.856 8771 | 2942  | 1.143 1229 | 9.998 8796 | 16 | 10 |    |
| 7  | 0  | 8.856 0493 | 2925 | 8.857 1713 | 2940  | 1.142 8287 | 9.998 8780 | 15 | 0  | 53 |
|    | 10 | 8.856 3418 | 2922 | 8.857 4653 | 2937  | 1.142 5347 | 9.998 8765 | 15 | 50 |    |
|    | 20 | 8.856 6340 | 2921 | 8.857 7590 | 2936  | 1.142 2410 | 9.998 8750 | 15 | 40 |    |
|    | 30 | 8.856 9261 | 2918 | 8.858 0526 | 2934  | 1.141 9474 | 9.998 8735 | 15 | 30 |    |
|    | 40 | 8.857 2179 | 2917 | 8.858 3460 | 2931  | 1.141 6540 | 9.998 8720 | 15 | 20 |    |
|    | 50 | 8.857 5096 | 2914 | 8.858 6391 | 2930  | 1.141 3609 | 9.998 8705 | 16 | 10 |    |
| 8  | 0  | 8.857 8010 | 2913 | 8.858 9321 | 2928  | 1.141 0679 | 9.998 8689 | 15 | 0  | 52 |
|    | 10 | 8.858 0923 | 2911 | 8.859 2249 | 2926  | 1.140 7751 | 9.998 8674 | 15 | 50 |    |
|    | 20 | 8.858 3834 | 2908 | 8.859 5175 | 2924  | 1.140 4825 | 9.998 8659 | 15 | 40 |    |
|    | 30 | 8.858 6742 | 2907 | 8.859 8099 | 2922  | 1.140 1901 | 9.998 8644 | 16 | 30 |    |
|    | 40 | 8.858 9649 | 2905 | 8.860 1021 | 2920  | 1.139 8979 | 9.998 8628 | 15 | 20 |    |
|    | 50 | 8.859 2554 | 2903 | 8.860 3941 | 2918  | 1.139 6059 | 9.998 8613 | 15 | 10 |    |
| 9  | 0  | 8.859 5457 | 2900 | 8.860 6859 | 2916  | 1.139 3141 | 9.998 8598 | 15 | 0  | 51 |
|    | 10 | 8.859 8357 | 2899 | 8.860 9775 | 2914  | 1.139 0225 | 9.998 8583 | 16 | 50 |    |
|    | 20 | 8.860 1256 | 2897 | 8.861 2689 | 2912  | 1.138 7311 | 9.998 8567 | 15 | 40 |    |
|    | 30 | 8.860 4153 | 2895 | 8.861 5601 | 2911  | 1.138 4399 | 9.998 8552 | 15 | 30 |    |
|    | 40 | 8.860 7048 | 2893 | 8.861 8512 | 2908  | 1.138 1488 | 9.998 8537 | 16 | 20 |    |
|    | 50 | 8.860 9941 | 2892 | 8.862 1420 | 2907  | 1.137 8580 | 9.998 8521 | 15 | 10 |    |
| 10 | 0  | 8.861 2833 |      | 8.862 4327 |       | 1.137 5673 | 9.998 8506 | 15 | 0  | 50 |
|    |    | Cos        | d.   | Cotg       | d.    | Tang       | Sin        | d. |    |    |



|    | "  | Sin        | d.   | Tang       | d. c. | Cotg       | Cos        | d. | "  |    |
|----|----|------------|------|------------|-------|------------|------------|----|----|----|
| 10 | 0  | 8.861 2833 | 2889 | 8.862 4327 | 2904  | 1.137 5673 | 9.998 8506 | 15 | 0  | 50 |
|    | 10 | 8.861 5722 | 2887 | 8.862 7231 | 2903  | 1.137 2769 | 9.998 8491 | 16 | 50 |    |
|    | 20 | 8.861 8609 | 2886 | 8.863 0134 | 2901  | 1.136 9866 | 9.998 8475 | 15 | 40 |    |
|    | 30 | 8.862 1495 | 2883 | 8.863 3035 | 2898  | 1.136 6965 | 9.998 8460 | 15 | 30 |    |
|    | 40 | 8.862 4378 | 2881 | 8.863 5933 | 2897  | 1.136 4067 | 9.998 8445 | 16 | 20 |    |
|    | 50 | 8.862 7259 | 2880 | 8.863 8830 | 2895  | 1.136 1170 | 9.998 8429 | 15 | 10 |    |
| 11 | 0  | 8.863 0139 | 2878 | 8.864 1725 | 2893  | 1.135 8275 | 9.998 8414 | 16 | 0  | 49 |
|    | 10 | 8.863 3017 | 2876 | 8.864 4618 | 2892  | 1.135 5382 | 9.998 8398 | 15 | 50 |    |
|    | 20 | 8.863 5893 | 2873 | 8.864 7510 | 2889  | 1.135 2490 | 9.998 8383 | 15 | 40 |    |
|    | 30 | 8.863 8766 | 2872 | 8.865 0399 | 2887  | 1.134 9601 | 9.998 8368 | 16 | 30 |    |
|    | 40 | 8.864 1638 | 2870 | 8.865 3286 | 2886  | 1.134 6714 | 9.998 8352 | 15 | 20 |    |
|    | 50 | 8.864 4508 | 2868 | 8.865 6172 | 2883  | 1.134 3828 | 9.998 8337 | 16 | 10 |    |
| 12 | 0  | 8.864 7376 | 2867 | 8.865 9055 | 2882  | 1.134 0945 | 9.998 8321 | 15 | 0  | 48 |
|    | 10 | 8.865 0243 | 2864 | 8.866 1937 | 2880  | 1.133 8063 | 9.998 8306 | 16 | 50 |    |
|    | 20 | 8.865 3107 | 2862 | 8.866 4817 | 2878  | 1.133 5183 | 9.998 8290 | 15 | 40 |    |
|    | 30 | 8.865 5969 | 2861 | 8.866 7695 | 2876  | 1.133 2305 | 9.998 8275 | 16 | 30 |    |
|    | 40 | 8.865 8830 | 2859 | 8.867 0571 | 2874  | 1.132 9429 | 9.998 8259 | 15 | 20 |    |
|    | 50 | 8.866 1689 | 2856 | 8.867 3445 | 2872  | 1.132 6555 | 9.998 8244 | 16 | 10 |    |
| 13 | 0  | 8.866 4545 | 2855 | 8.867 6317 | 2870  | 1.132 3683 | 9.998 8228 | 15 | 0  | 47 |
|    | 10 | 8.866 7400 | 2853 | 8.867 9187 | 2869  | 1.132 0813 | 9.998 8213 | 16 | 50 |    |
|    | 20 | 8.867 0253 | 2851 | 8.868 2056 | 2867  | 1.131 7944 | 9.998 8197 | 15 | 40 |    |
|    | 30 | 8.867 3104 | 2849 | 8.868 4923 | 2864  | 1.131 5077 | 9.998 8182 | 16 | 30 |    |
|    | 40 | 8.867 5953 | 2848 | 8.868 7787 | 2863  | 1.131 2213 | 9.998 8166 | 15 | 20 |    |
|    | 50 | 8.867 8801 | 2845 | 8.869 0650 | 2861  | 1.130 9350 | 9.998 8151 | 16 | 10 |    |
| 14 | 0  | 8.868 1646 | 2844 | 8.869 3511 | 2859  | 1.130 6489 | 9.998 8135 | 16 | 0  | 46 |
|    | 10 | 8.868 4490 | 2841 | 8.869 6370 | 2858  | 1.130 3630 | 9.998 8119 | 15 | 50 |    |
|    | 20 | 8.868 7331 | 2840 | 8.869 9228 | 2855  | 1.130 0772 | 9.998 8104 | 16 | 40 |    |
|    | 30 | 8.869 0171 | 2838 | 8.870 2083 | 2854  | 1.129 7917 | 9.998 8088 | 15 | 30 |    |
|    | 40 | 8.869 3009 | 2836 | 8.870 4937 | 2852  | 1.129 5063 | 9.998 8073 | 16 | 20 |    |
|    | 50 | 8.869 5845 | 2835 | 8.870 7789 | 2849  | 1.129 2211 | 9.998 8057 | 16 | 10 |    |
| 15 | 0  | 8.869 8680 | 2832 | 8.871 0638 | 2848  | 1.128 9362 | 9.998 8041 | 15 | 0  | 45 |
|    | 10 | 8.870 1512 | 2831 | 8.871 3486 | 2847  | 1.128 6514 | 9.998 8026 | 16 | 50 |    |
|    | 20 | 8.870 4343 | 2828 | 8.871 6333 | 2844  | 1.128 3667 | 9.998 8010 | 16 | 40 |    |
|    | 30 | 8.870 7171 | 2827 | 8.871 9177 | 2842  | 1.128 0823 | 9.998 7994 | 15 | 30 |    |
|    | 40 | 8.870 9998 | 2825 | 8.872 2019 | 2841  | 1.127 7981 | 9.998 7979 | 16 | 20 |    |
|    | 50 | 8.871 2823 | 2823 | 8.872 4860 | 2839  | 1.127 5140 | 9.998 7963 | 16 | 10 |    |
| 16 | 0  | 8.871 5646 | 2821 | 8.872 7699 | 2837  | 1.127 2301 | 9.998 7947 | 16 | 0  | 44 |
|    | 10 | 8.871 8467 | 2820 | 8.873 0536 | 2835  | 1.126 9464 | 9.998 7931 | 15 | 50 |    |
|    | 20 | 8.872 1287 | 2818 | 8.873 3371 | 2834  | 1.126 6629 | 9.998 7916 | 16 | 40 |    |
|    | 30 | 8.872 4105 | 2815 | 8.873 6205 | 2831  | 1.126 3795 | 9.998 7900 | 16 | 30 |    |
|    | 40 | 8.872 6920 | 2814 | 8.873 9036 | 2830  | 1.126 0964 | 9.998 7884 | 15 | 20 |    |
|    | 50 | 8.872 9734 | 2812 | 8.874 1866 | 2828  | 1.125 8134 | 9.998 7869 | 16 | 10 |    |
| 17 | 0  | 8.873 2546 | 2811 | 8.874 4694 | 2826  | 1.125 5306 | 9.998 7853 | 16 | 0  | 43 |
|    | 10 | 8.873 5357 | 2808 | 8.874 7520 | 2824  | 1.125 2480 | 9.998 7837 | 16 | 50 |    |
|    | 20 | 8.873 8165 | 2807 | 8.875 0344 | 2822  | 1.124 9656 | 9.998 7821 | 16 | 40 |    |
|    | 30 | 8.874 0972 | 2804 | 8.875 3166 | 2821  | 1.124 6834 | 9.998 7805 | 15 | 30 |    |
|    | 40 | 8.874 3776 | 2803 | 8.875 5987 | 2819  | 1.124 4013 | 9.998 7790 | 16 | 20 |    |
|    | 50 | 8.874 6579 | 2802 | 8.875 8806 | 2817  | 1.124 1194 | 9.998 7774 | 16 | 10 |    |
| 18 | 0  | 8.874 9381 | 2799 | 8.876 1623 | 2815  | 1.123 8377 | 9.998 7758 | 16 | 0  | 42 |
|    | 10 | 8.875 2180 | 2797 | 8.876 4438 | 2813  | 1.123 5562 | 9.998 7742 | 16 | 50 |    |
|    | 20 | 8.875 4977 | 2796 | 8.876 7251 | 2812  | 1.123 2749 | 9.998 7726 | 16 | 40 |    |
|    | 30 | 8.875 7773 | 2794 | 8.877 0063 | 2810  | 1.122 9937 | 9.998 7710 | 15 | 30 |    |
|    | 40 | 8.876 0567 | 2792 | 8.877 2873 | 2808  | 1.122 7127 | 9.998 7695 | 16 | 20 |    |
|    | 50 | 8.876 3359 | 2791 | 8.877 5681 | 2806  | 1.122 4319 | 9.998 7679 | 16 | 10 |    |
| 19 | 0  | 8.876 6150 | 2788 | 8.877 8487 | 2804  | 1.122 1513 | 9.998 7663 | 16 | 0  | 41 |
|    | 10 | 8.876 8938 | 2787 | 8.878 1291 | 2803  | 1.121 8709 | 9.998 7647 | 16 | 50 |    |
|    | 20 | 8.877 1725 | 2785 | 8.878 4094 | 2801  | 1.121 5906 | 9.998 7631 | 16 | 40 |    |
|    | 30 | 8.877 4510 | 2783 | 8.878 6895 | 2799  | 1.121 3105 | 9.998 7615 | 16 | 30 |    |
|    | 40 | 8.877 7293 | 2781 | 8.878 9694 | 2797  | 1.121 0306 | 9.998 7599 | 16 | 20 |    |
|    | 50 | 8.878 0074 | 2780 | 8.879 2491 | 2795  | 1.120 7509 | 9.998 7583 | 16 | 10 |    |
| 20 | 0  | 8.878 2854 |      | 8.879 5286 |       | 1.120 4714 | 9.998 7567 | 16 | 0  | 40 |
|    | "  | Cos        | d.   | Cotg       | d.    | Tang       | Sin        | d. | "  |    |



|    | "  | Sin        | d.   | Tang       | d. c. | Cotg       | Cos        | d. | "  |    |
|----|----|------------|------|------------|-------|------------|------------|----|----|----|
| 20 | 0  | 8.878 2854 | 2777 | 8.879 5286 | 2794  | 1.120 4714 | 9.998 7567 | 16 | 0  | 40 |
|    | 10 | 8.878 5631 | 2776 | 8.879 8080 | 2792  | 1.120 1920 | 9.998 7551 | 16 | 50 |    |
|    | 20 | 8.878 8407 | 2774 | 8.880 0872 | 2790  | 1.119 9128 | 9.998 7535 | 16 | 40 |    |
|    | 30 | 8.879 1181 | 2773 | 8.880 3662 | 2788  | 1.119 6338 | 9.998 7519 | 16 | 30 |    |
|    | 40 | 8.879 3954 | 2770 | 8.880 6450 | 2787  | 1.119 3550 | 9.998 7503 | 16 | 20 |    |
|    | 50 | 8.879 6724 | 2769 | 8.880 9237 | 2785  | 1.119 0763 | 9.998 7487 | 16 | 10 |    |
| 21 | 0  | 8.879 9493 | 2767 | 8.881 2022 | 2783  | 1.118 7978 | 9.998 7471 | 16 | 0  | 39 |
|    | 10 | 8.880 2260 | 2766 | 8.881 4805 | 2781  | 1.118 5195 | 9.998 7455 | 16 | 50 |    |
|    | 20 | 8.880 5026 | 2763 | 8.881 7586 | 2780  | 1.118 2414 | 9.998 7439 | 16 | 40 |    |
|    | 30 | 8.880 7789 | 2762 | 8.882 0366 | 2778  | 1.117 9634 | 9.998 7423 | 16 | 30 |    |
|    | 40 | 8.881 0551 | 2760 | 8.882 3144 | 2776  | 1.117 6856 | 9.998 7407 | 16 | 20 |    |
|    | 50 | 8.881 3311 | 2758 | 8.882 5920 | 2774  | 1.117 4080 | 9.998 7391 | 16 | 10 |    |
| 22 | 0  | 8.881 6069 | 2756 | 8.882 8694 | 2773  | 1.117 1306 | 9.998 7375 | 16 | 0  | 38 |
|    | 10 | 8.881 8825 | 2755 | 8.883 1467 | 2770  | 1.116 8533 | 9.998 7359 | 16 | 50 |    |
|    | 20 | 8.882 1580 | 2753 | 8.883 4237 | 2769  | 1.116 5763 | 9.998 7343 | 16 | 40 |    |
|    | 30 | 8.882 4333 | 2751 | 8.883 7006 | 2768  | 1.116 2994 | 9.998 7327 | 16 | 30 |    |
|    | 40 | 8.882 7084 | 2750 | 8.883 9774 | 2765  | 1.116 0226 | 9.998 7311 | 16 | 20 |    |
|    | 50 | 8.882 9834 | 2747 | 8.884 2539 | 2764  | 1.115 7461 | 9.998 7295 | 17 | 10 |    |
| 23 | 0  | 8.883 2581 | 2746 | 8.884 5303 | 2762  | 1.115 4697 | 9.998 7278 | 16 | 0  | 37 |
|    | 10 | 8.883 5327 | 2745 | 8.884 8065 | 2760  | 1.115 1935 | 9.998 7262 | 16 | 50 |    |
|    | 20 | 8.883 8072 | 2742 | 8.885 0825 | 2759  | 1.114 9175 | 9.998 7246 | 16 | 40 |    |
|    | 30 | 8.884 0814 | 2741 | 8.885 3584 | 2757  | 1.114 6416 | 9.998 7230 | 16 | 30 |    |
|    | 40 | 8.884 3555 | 2739 | 8.885 6341 | 2755  | 1.114 3659 | 9.998 7214 | 16 | 20 |    |
|    | 50 | 8.884 6294 | 2737 | 8.885 9096 | 2754  | 1.114 0904 | 9.998 7198 | 17 | 10 |    |
| 24 | 0  | 8.884 9031 | 2735 | 8.886 1850 | 2751  | 1.113 8150 | 9.998 7181 | 16 | 0  | 36 |
|    | 10 | 8.885 1766 | 2734 | 8.886 4601 | 2750  | 1.113 5399 | 9.998 7165 | 16 | 50 |    |
|    | 20 | 8.885 4500 | 2732 | 8.886 7351 | 2749  | 1.113 2649 | 9.998 7149 | 16 | 40 |    |
|    | 30 | 8.885 7232 | 2731 | 8.887 0100 | 2746  | 1.112 9900 | 9.998 7133 | 17 | 30 |    |
|    | 40 | 8.885 9963 | 2728 | 8.887 2846 | 2745  | 1.112 7154 | 9.998 7116 | 16 | 20 |    |
|    | 50 | 8.886 2691 | 2727 | 8.887 5591 | 2743  | 1.112 4409 | 9.998 7100 | 16 | 10 |    |
| 25 | 0  | 8.886 5418 | 2725 | 8.887 8334 | 2741  | 1.112 1666 | 9.998 7084 | 16 | 0  | 35 |
|    | 10 | 8.886 8143 | 2724 | 8.888 1075 | 2740  | 1.111 8925 | 9.998 7068 | 17 | 50 |    |
|    | 20 | 8.887 0867 | 2721 | 8.888 3815 | 2738  | 1.111 6185 | 9.998 7051 | 16 | 40 |    |
|    | 30 | 8.887 3588 | 2720 | 8.888 6553 | 2736  | 1.111 3447 | 9.998 7035 | 16 | 30 |    |
|    | 40 | 8.887 6308 | 2719 | 8.888 9289 | 2735  | 1.111 0711 | 9.998 7019 | 16 | 20 |    |
|    | 50 | 8.887 9027 | 2716 | 8.889 2024 | 2733  | 1.110 7976 | 9.998 7003 | 17 | 10 |    |
| 26 | 0  | 8.888 1743 | 2715 | 8.889 4757 | 2731  | 1.110 5243 | 9.998 6986 | 16 | 0  | 34 |
|    | 10 | 8.888 4458 | 2713 | 8.889 7488 | 2730  | 1.110 2512 | 9.998 6970 | 16 | 50 |    |
|    | 20 | 8.888 7171 | 2712 | 8.890 0218 | 2727  | 1.109 9782 | 9.998 6954 | 17 | 40 |    |
|    | 30 | 8.888 9883 | 2709 | 8.890 2945 | 2726  | 1.109 7055 | 9.998 6937 | 16 | 30 |    |
|    | 40 | 8.889 2592 | 2708 | 8.890 5671 | 2725  | 1.109 4329 | 9.998 6921 | 17 | 20 |    |
|    | 50 | 8.889 5300 | 2707 | 8.890 8396 | 2723  | 1.109 1604 | 9.998 6904 | 16 | 10 |    |
| 27 | 0  | 8.889 8007 | 2704 | 8.891 1119 | 2721  | 1.108 8881 | 9.998 6888 | 16 | 0  | 33 |
|    | 10 | 8.890 0711 | 2703 | 8.891 3840 | 2719  | 1.108 6160 | 9.998 6872 | 17 | 50 |    |
|    | 20 | 8.890 3414 | 2702 | 8.891 6559 | 2718  | 1.108 3441 | 9.998 6855 | 16 | 40 |    |
|    | 30 | 8.890 6116 | 2699 | 8.891 9277 | 2716  | 1.108 0723 | 9.998 6839 | 17 | 30 |    |
|    | 40 | 8.890 8815 | 2698 | 8.892 1993 | 2714  | 1.107 8007 | 9.998 6822 | 16 | 20 |    |
|    | 50 | 8.891 1513 | 2696 | 8.892 4707 | 2713  | 1.107 5293 | 9.998 6806 | 16 | 10 |    |
| 28 | 0  | 8.891 4209 | 2695 | 8.892 7420 | 2711  | 1.107 2580 | 9.998 6790 | 17 | 0  | 32 |
|    | 10 | 8.891 6904 | 2693 | 8.893 0131 | 2709  | 1.106 9869 | 9.998 6773 | 16 | 50 |    |
|    | 20 | 8.891 9597 | 2691 | 8.893 2840 | 2708  | 1.106 7160 | 9.998 6757 | 17 | 40 |    |
|    | 30 | 8.892 2288 | 2689 | 8.893 5548 | 2706  | 1.106 4452 | 9.998 6740 | 16 | 30 |    |
|    | 40 | 8.892 4977 | 2688 | 8.893 8254 | 2704  | 1.106 1746 | 9.998 6724 | 17 | 20 |    |
|    | 50 | 8.892 7665 | 2686 | 8.894 0958 | 2702  | 1.105 9042 | 9.998 6707 | 16 | 10 |    |
| 29 | 0  | 8.893 0351 | 2685 | 8.894 3660 | 2701  | 1.105 6340 | 9.998 6691 | 17 | 0  | 31 |
|    | 10 | 8.893 3036 | 2682 | 8.894 6361 | 2700  | 1.105 3639 | 9.998 6674 | 16 | 50 |    |
|    | 20 | 8.893 5718 | 2682 | 8.894 9061 | 2697  | 1.105 0939 | 9.998 6658 | 17 | 40 |    |
|    | 30 | 8.893 8400 | 2679 | 8.895 1758 | 2696  | 1.104 8242 | 9.998 6641 | 16 | 30 |    |
|    | 40 | 8.894 1079 | 2678 | 8.895 4454 | 2695  | 1.104 5546 | 9.998 6625 | 17 | 20 |    |
|    | 50 | 8.894 3757 | 2676 | 8.895 7149 | 2693  | 1.104 2851 | 9.998 6608 | 16 | 10 |    |
| 30 | 0  | 8.894 6433 |      | 8.895 9842 |       | 1.104 0158 | 9.998 6591 | 17 | 0  | 30 |
|    | "  | Cos        | d.   | Cotg       | d.    | Tang       | Sin        | d. | "  |    |



|    | "  | Sin        | c.   | Tang       | d. c. | Cotg       | Cos        | d. | "  |    |
|----|----|------------|------|------------|-------|------------|------------|----|----|----|
| 30 | 0  | 8.894 6433 | 2674 | 8.895 9842 | 2691  | 1.104 0158 | 9.998 6591 | 16 | 0  | 30 |
|    | 10 | 8.894 9107 | 2673 | 8.896 2533 | 2689  | 1.103 7467 | 9.998 6575 | 17 | 50 |    |
|    | 20 | 8.895 1780 | 2671 | 8.896 5222 | 2688  | 1.103 4778 | 9.998 6558 | 16 | 40 |    |
|    | 30 | 8.895 4451 | 2670 | 8.896 7910 | 2686  | 1.103 2090 | 9.998 6542 | 17 | 30 |    |
|    | 40 | 8.895 7121 | 2668 | 8.897 0596 | 2684  | 1.102 9404 | 9.998 6525 | 17 | 20 |    |
|    | 50 | 8.895 9789 | 2666 | 8.897 3280 | 2683  | 1.102 6720 | 9.998 6508 | 17 | 10 |    |
| 31 | 0  | 8.896 2455 | 2665 | 8.897 5963 | 2681  | 1.102 4037 | 9.998 6492 | 17 | 0  | 29 |
|    | 10 | 8.896 5120 | 2663 | 8.897 8644 | 2680  | 1.102 1356 | 9.998 6475 | 16 | 50 |    |
|    | 20 | 8.896 7783 | 2661 | 8.898 1324 | 2678  | 1.101 8676 | 9.998 6459 | 17 | 40 |    |
|    | 30 | 8.897 0444 | 2660 | 8.898 4002 | 2676  | 1.101 5998 | 9.998 6442 | 17 | 30 |    |
|    | 40 | 8.897 3104 | 2658 | 8.898 6678 | 2675  | 1.101 3322 | 9.998 6425 | 16 | 20 |    |
|    | 50 | 8.897 5762 | 2656 | 8.898 9353 | 2673  | 1.101 0647 | 9.998 6409 | 17 | 10 |    |
| 32 | 0  | 8.897 8418 | 2655 | 8.899 2026 | 2672  | 1.100 7974 | 9.998 6392 | 17 | 0  | 28 |
|    | 10 | 8.898 1073 | 2653 | 8.899 4698 | 2669  | 1.100 5302 | 9.998 6375 | 17 | 50 |    |
|    | 20 | 8.898 3726 | 2651 | 8.899 7367 | 2666  | 1.100 2633 | 9.998 6358 | 16 | 40 |    |
|    | 30 | 8.898 6377 | 2650 | 8.900 0036 | 2666  | 1.099 9964 | 9.998 6342 | 17 | 30 |    |
|    | 40 | 8.898 9027 | 2648 | 8.900 2702 | 2665  | 1.099 7298 | 9.998 6325 | 17 | 20 |    |
|    | 50 | 8.899 1675 | 2647 | 8.900 5367 | 2663  | 1.099 4633 | 9.998 6308 | 17 | 10 |    |
| 33 | 0  | 8.899 4322 | 2645 | 8.900 8030 | 2662  | 1.099 1970 | 9.998 6292 | 17 | 0  | 27 |
|    | 10 | 8.899 6967 | 2643 | 8.901 0692 | 2660  | 1.098 9308 | 9.998 6275 | 17 | 50 |    |
|    | 20 | 8.899 9610 | 2642 | 8.901 3352 | 2659  | 1.098 6648 | 9.998 6258 | 17 | 40 |    |
|    | 30 | 8.900 2252 | 2640 | 8.901 6011 | 2657  | 1.098 3989 | 9.998 6241 | 17 | 30 |    |
|    | 40 | 8.900 4892 | 2639 | 8.901 8668 | 2655  | 1.098 1332 | 9.998 6224 | 16 | 20 |    |
|    | 50 | 8.900 7531 | 2637 | 8.902 1323 | 2654  | 1.097 8677 | 9.998 6208 | 17 | 10 |    |
| 34 | 0  | 8.901 0168 | 2635 | 8.902 3977 | 2652  | 1.097 6023 | 9.998 6191 | 17 | 0  | 26 |
|    | 10 | 8.901 2803 | 2634 | 8.902 6629 | 2650  | 1.097 3371 | 9.998 6174 | 17 | 50 |    |
|    | 20 | 8.901 5437 | 2632 | 8.902 9279 | 2649  | 1.097 0721 | 9.998 6157 | 17 | 40 |    |
|    | 30 | 8.901 8069 | 2630 | 8.903 1928 | 2648  | 1.096 8072 | 9.998 6140 | 17 | 30 |    |
|    | 40 | 8.902 0699 | 2629 | 8.903 4576 | 2645  | 1.096 5424 | 9.998 6123 | 16 | 20 |    |
|    | 50 | 8.902 3328 | 2627 | 8.903 7221 | 2645  | 1.096 2779 | 9.998 6107 | 17 | 10 |    |
| 35 | 0  | 8.902 5955 | 2626 | 8.903 9866 | 2642  | 1.096 0134 | 9.998 6090 | 17 | 0  | 25 |
|    | 10 | 8.902 8581 | 2624 | 8.904 2508 | 2641  | 1.095 7492 | 9.998 6073 | 17 | 50 |    |
|    | 20 | 8.903 1205 | 2623 | 8.904 5149 | 2639  | 1.095 4851 | 9.998 6056 | 17 | 40 |    |
|    | 30 | 8.903 3828 | 2620 | 8.904 7788 | 2638  | 1.095 2212 | 9.998 6039 | 17 | 30 |    |
|    | 40 | 8.903 6448 | 2620 | 8.905 0426 | 2637  | 1.094 9574 | 9.998 6022 | 17 | 20 |    |
|    | 50 | 8.903 9068 | 2617 | 8.905 3063 | 2634  | 1.094 6937 | 9.998 6005 | 17 | 10 |    |
| 36 | 0  | 8.904 1685 | 2617 | 8.905 5697 | 2633  | 1.094 4303 | 9.998 5988 | 17 | 0  | 24 |
|    | 10 | 8.904 4302 | 2614 | 8.905 8330 | 2632  | 1.094 1670 | 9.998 5971 | 17 | 50 |    |
|    | 20 | 8.904 6916 | 2613 | 8.906 0962 | 2630  | 1.093 9038 | 9.998 5954 | 17 | 40 |    |
|    | 30 | 8.904 9529 | 2611 | 8.906 3592 | 2628  | 1.093 6408 | 9.998 5937 | 17 | 30 |    |
|    | 40 | 8.905 2140 | 2610 | 8.906 6220 | 2627  | 1.093 3780 | 9.998 5920 | 17 | 20 |    |
|    | 50 | 8.905 4750 | 2608 | 8.906 8847 | 2625  | 1.093 1153 | 9.998 5903 | 17 | 10 |    |
| 37 | 0  | 8.905 7358 | 2607 | 8.907 1472 | 2624  | 1.092 8528 | 9.998 5886 | 17 | 0  | 23 |
|    | 10 | 8.905 9965 | 2605 | 8.907 4096 | 2622  | 1.092 5904 | 9.998 5869 | 17 | 50 |    |
|    | 20 | 8.906 2570 | 2604 | 8.907 6718 | 2620  | 1.092 3282 | 9.998 5852 | 17 | 40 |    |
|    | 30 | 8.906 5174 | 2602 | 8.907 9338 | 2619  | 1.092 0662 | 9.998 5835 | 17 | 30 |    |
|    | 40 | 8.906 7776 | 2600 | 8.908 1957 | 2618  | 1.091 8043 | 9.998 5818 | 17 | 20 |    |
|    | 50 | 8.907 0376 | 2599 | 8.908 4575 | 2615  | 1.091 5425 | 9.998 5801 | 17 | 10 |    |
| 38 | 0  | 8.907 2975 | 2597 | 8.908 7190 | 2615  | 1.091 2810 | 9.998 5784 | 17 | 0  | 22 |
|    | 10 | 8.907 5572 | 2596 | 8.908 9805 | 2612  | 1.091 0195 | 9.998 5767 | 17 | 50 |    |
|    | 20 | 8.907 8168 | 2594 | 8.909 2417 | 2612  | 1.090 7583 | 9.998 5750 | 17 | 40 |    |
|    | 30 | 8.908 0762 | 2592 | 8.909 5029 | 2609  | 1.090 4971 | 9.998 5733 | 17 | 30 |    |
|    | 40 | 8.908 3354 | 2591 | 8.909 7638 | 2608  | 1.090 2362 | 9.998 5716 | 17 | 20 |    |
|    | 50 | 8.908 5945 | 2590 | 8.910 0246 | 2607  | 1.089 9754 | 9.998 5699 | 17 | 10 |    |
| 39 | 0  | 8.908 8535 | 2588 | 8.910 2853 | 2605  | 1.089 7147 | 9.998 5682 | 17 | 0  | 21 |
|    | 10 | 8.909 1123 | 2586 | 8.910 5458 | 2603  | 1.089 4542 | 9.998 5665 | 18 | 50 |    |
|    | 20 | 8.909 3709 | 2585 | 8.910 8061 | 2602  | 1.089 1939 | 9.998 5647 | 17 | 40 |    |
|    | 30 | 8.909 6294 | 2583 | 8.911 0663 | 2601  | 1.088 9337 | 9.998 5630 | 17 | 30 |    |
|    | 40 | 8.909 8877 | 2582 | 8.911 3264 | 2599  | 1.088 6736 | 9.998 5613 | 17 | 20 |    |
|    | 50 | 8.910 1459 | 2580 | 8.911 5863 | 2597  | 1.088 4137 | 9.998 5596 | 17 | 10 |    |
| 40 | 0  | 8.910 4039 |      | 8.911 8460 |       | 1.088 1540 | 9.998 5579 |    | 0  | 20 |
|    | "  | Cos        | d.   | Cotg       | d. c. | Tang       | Sin        | d. | "  |    |



|    | "  | Sin        | d.   | Tang       | d. c. | Cotg       | Cos        | d. | "  |    |
|----|----|------------|------|------------|-------|------------|------------|----|----|----|
| 40 | 0  | 8.910 4039 | 2578 | 8.911 8460 | 2596  | 1.088 1540 | 9.998 5579 | 17 | 0  | 20 |
|    | 10 | 8.910 6617 | 2577 | 8.912 1056 | 2594  | 1.087 8944 | 9.998 5562 | 18 | 50 |    |
|    | 20 | 8.910 9194 | 2576 | 8.912 3650 | 2593  | 1.087 6350 | 9.998 5544 | 17 | 40 |    |
|    | 30 | 8.911 1770 | 2574 | 8.912 6243 | 2591  | 1.087 3757 | 9.998 5527 | 17 | 30 |    |
|    | 40 | 8.911 4344 | 2572 | 8.912 8834 | 2590  | 1.087 1166 | 9.998 5510 | 17 | 20 |    |
|    | 50 | 8.911 6916 | 2571 | 8.913 1424 | 2588  | 1.086 8576 | 9.998 5493 | 17 | 10 |    |
| 41 | 0  | 8.911 9487 | 2570 | 8.913 4012 | 2586  | 1.086 5988 | 9.998 5475 | 17 | 0  | 19 |
|    | 10 | 8.912 2057 | 2567 | 8.913 6598 | 2585  | 1.086 3402 | 9.998 5458 | 17 | 50 |    |
|    | 20 | 8.912 4624 | 2567 | 8.913 9183 | 2584  | 1.086 0817 | 9.998 5441 | 17 | 40 |    |
|    | 30 | 8.912 7191 | 2565 | 8.914 1767 | 2582  | 1.085 8233 | 9.998 5424 | 18 | 30 |    |
|    | 40 | 8.912 9756 | 2563 | 8.914 4349 | 2581  | 1.085 5651 | 9.998 5406 | 17 | 20 |    |
|    | 50 | 8.913 2319 | 2562 | 8.914 6930 | 2579  | 1.085 3070 | 9.998 5389 | 17 | 10 |    |
| 42 | 0  | 8.913 4881 | 2560 | 8.914 9509 | 2577  | 1.085 0491 | 9.998 5372 | 18 | 0  | 18 |
|    | 10 | 8.913 7441 | 2558 | 8.915 2086 | 2576  | 1.084 7914 | 9.998 5354 | 17 | 50 |    |
|    | 20 | 8.913 9999 | 2558 | 8.915 4662 | 2575  | 1.084 5338 | 9.998 5337 | 17 | 40 |    |
|    | 30 | 8.914 2557 | 2555 | 8.915 7237 | 2573  | 1.084 2763 | 9.998 5320 | 18 | 30 |    |
|    | 40 | 8.914 5112 | 2555 | 8.915 9810 | 2571  | 1.084 0190 | 9.998 5302 | 17 | 20 |    |
|    | 50 | 8.914 7667 | 2552 | 8.916 2381 | 2571  | 1.083 7619 | 9.998 5285 | 17 | 10 |    |
| 43 | 0  | 8.915 0219 | 2551 | 8.916 4952 | 2568  | 1.083 5048 | 9.998 5268 | 18 | 0  | 17 |
|    | 10 | 8.915 2770 | 2550 | 8.916 7520 | 2567  | 1.083 2480 | 9.998 5250 | 17 | 50 |    |
|    | 20 | 8.915 5320 | 2548 | 8.917 0087 | 2566  | 1.082 9913 | 9.998 5233 | 17 | 40 |    |
|    | 30 | 8.915 7868 | 2547 | 8.917 2653 | 2564  | 1.082 7347 | 9.998 5216 | 18 | 30 |    |
|    | 40 | 8.916 0415 | 2545 | 8.917 5217 | 2562  | 1.082 4783 | 9.998 5198 | 17 | 20 |    |
|    | 50 | 8.916 2960 | 2544 | 8.917 7779 | 2561  | 1.082 2221 | 9.998 5181 | 17 | 10 |    |
| 44 | 0  | 8.916 5504 | 2542 | 8.918 0340 | 2560  | 1.081 9660 | 9.998 5163 | 17 | 0  | 16 |
|    | 10 | 8.916 8046 | 2540 | 8.918 2900 | 2558  | 1.081 7100 | 9.998 5146 | 18 | 50 |    |
|    | 20 | 8.917 0586 | 2539 | 8.918 5458 | 2556  | 1.081 4542 | 9.998 5128 | 17 | 40 |    |
|    | 30 | 8.917 3125 | 2538 | 8.918 8014 | 2556  | 1.081 1986 | 9.998 5111 | 18 | 30 |    |
|    | 40 | 8.917 5663 | 2536 | 8.919 0570 | 2553  | 1.080 9430 | 9.998 5093 | 17 | 20 |    |
|    | 50 | 8.917 8199 | 2535 | 8.919 3123 | 2552  | 1.080 6877 | 9.998 5076 | 17 | 10 |    |
| 45 | 0  | 8.918 0734 | 2533 | 8.919 5675 | 2551  | 1.080 4325 | 9.998 5058 | 17 | 0  | 15 |
|    | 10 | 8.918 3267 | 2532 | 8.919 8226 | 2549  | 1.080 1774 | 9.998 5041 | 18 | 50 |    |
|    | 20 | 8.918 5799 | 2530 | 8.920 0775 | 2548  | 1.079 9225 | 9.998 5023 | 17 | 40 |    |
|    | 30 | 8.918 8320 | 2529 | 8.920 3323 | 2546  | 1.079 6677 | 9.998 5006 | 18 | 30 |    |
|    | 40 | 8.919 0858 | 2527 | 8.920 5869 | 2545  | 1.079 4131 | 9.998 4988 | 17 | 20 |    |
|    | 50 | 8.919 3385 | 2526 | 8.920 8414 | 2543  | 1.079 1586 | 9.998 4971 | 17 | 10 |    |
| 46 | 0  | 8.919 5911 | 2524 | 8.921 0957 | 2542  | 1.078 9043 | 9.998 4953 | 17 | 0  | 14 |
|    | 10 | 8.919 8435 | 2523 | 8.921 3499 | 2540  | 1.078 6501 | 9.998 4936 | 18 | 50 |    |
|    | 20 | 8.920 0958 | 2521 | 8.921 6039 | 2539  | 1.078 3961 | 9.998 4918 | 17 | 40 |    |
|    | 30 | 8.920 3479 | 2520 | 8.921 8578 | 2538  | 1.078 1422 | 9.998 4901 | 18 | 30 |    |
|    | 40 | 8.920 5999 | 2518 | 8.922 1116 | 2536  | 1.077 8884 | 9.998 4883 | 18 | 20 |    |
|    | 50 | 8.920 8517 | 2517 | 8.922 3652 | 2534  | 1.077 6348 | 9.998 4865 | 17 | 10 |    |
| 47 | 0  | 8.921 1034 | 2516 | 8.922 6186 | 2533  | 1.077 3814 | 9.998 4848 | 17 | 0  | 13 |
|    | 10 | 8.921 3550 | 2514 | 8.922 8719 | 2532  | 1.077 1281 | 9.998 4830 | 17 | 50 |    |
|    | 20 | 8.921 6064 | 2512 | 8.923 1251 | 2530  | 1.076 8749 | 9.998 4813 | 18 | 40 |    |
|    | 30 | 8.921 8576 | 2511 | 8.923 3781 | 2529  | 1.076 6219 | 9.998 4795 | 18 | 30 |    |
|    | 40 | 8.922 1087 | 2510 | 8.923 6310 | 2527  | 1.076 3690 | 9.998 4777 | 17 | 20 |    |
|    | 50 | 8.922 3597 | 2508 | 8.923 8837 | 2526  | 1.076 1163 | 9.998 4760 | 18 | 10 |    |
| 48 | 0  | 8.922 6105 | 2506 | 8.924 1363 | 2524  | 1.075 8637 | 9.998 4742 | 17 | 0  | 12 |
|    | 10 | 8.922 8611 | 2506 | 8.924 3887 | 2523  | 1.075 6113 | 9.998 4724 | 17 | 50 |    |
|    | 20 | 8.923 1117 | 2503 | 8.924 6410 | 2522  | 1.075 3590 | 9.998 4707 | 18 | 40 |    |
|    | 30 | 8.923 3620 | 2503 | 8.924 8932 | 2520  | 1.075 1068 | 9.998 4689 | 18 | 30 |    |
|    | 40 | 8.923 6123 | 2501 | 8.925 1452 | 2518  | 1.074 8548 | 9.998 4671 | 18 | 20 |    |
|    | 50 | 8.923 8624 | 2499 | 8.925 3970 | 2517  | 1.074 6030 | 9.998 4653 | 17 | 10 |    |
| 49 | 0  | 8.924 1123 | 2498 | 8.925 6487 | 2516  | 1.074 3513 | 9.998 4636 | 17 | 0  | 11 |
|    | 10 | 8.924 3621 | 2496 | 8.925 9003 | 2514  | 1.074 0997 | 9.998 4618 | 18 | 50 |    |
|    | 20 | 8.924 6117 | 2496 | 8.926 1517 | 2513  | 1.073 8483 | 9.998 4600 | 17 | 40 |    |
|    | 30 | 8.924 8613 | 2493 | 8.926 4030 | 2512  | 1.073 5970 | 9.998 4582 | 18 | 30 |    |
|    | 40 | 8.925 1106 | 2492 | 8.926 6542 | 2510  | 1.073 3458 | 9.998 4565 | 18 | 20 |    |
|    | 50 | 8.925 3598 | 2491 | 8.926 9052 | 2508  | 1.073 0948 | 9.998 4547 | 18 | 10 |    |
| 50 | 0  | 8.925 6089 |      | 8.927 1560 |       | 1.072 8440 | 9.998 4529 | 18 | 0  | 10 |
|    | "  | Cos        | d.   | Cotg       | d. c. | Tang       | Sin        | d. | "  |    |



|    | "  | Sin        | d.   | Tang       | d. c. | Cotg       | Cos        | d. | "  |    |
|----|----|------------|------|------------|-------|------------|------------|----|----|----|
| 50 | 0  | 8.925 6089 | 2489 | 8.927 1560 | 2507  | 1.072 8440 | 9.998 4529 | 18 | 0  | 10 |
|    | 10 | 8.925 8578 | 2488 | 8.927 4067 | 2506  | 1.072 5933 | 9.998 4511 | 18 | 50 |    |
|    | 20 | 8.926 1066 | 2487 | 8.927 6573 | 2504  | 1.072 3427 | 9.998 4493 | 18 | 40 |    |
|    | 30 | 8.926 3553 | 2485 | 8.927 9077 | 2503  | 1.072 0923 | 9.998 4476 | 18 | 30 |    |
|    | 40 | 8.926 6038 | 2483 | 8.928 1580 | 2501  | 1.071 8420 | 9.998 4458 | 18 | 20 |    |
|    | 50 | 8.926 8521 | 2482 | 8.928 4081 | 2500  | 1.071 5919 | 9.998 4440 | 18 | 10 |    |
| 51 | 0  | 8.927 1003 | 2481 | 8.928 6581 | 2499  | 1.071 3419 | 9.998 4422 | 18 | 0  | 9  |
|    | 10 | 8.927 3484 | 2479 | 8.928 9080 | 2497  | 1.071 0920 | 9.998 4404 | 18 | 50 |    |
|    | 20 | 8.927 5963 | 2478 | 8.929 1577 | 2496  | 1.070 8423 | 9.998 4386 | 18 | 40 |    |
|    | 30 | 8.927 8441 | 2477 | 8.929 4073 | 2494  | 1.070 5927 | 9.998 4368 | 18 | 30 |    |
|    | 40 | 8.928 0918 | 2475 | 8.929 6567 | 2493  | 1.070 3433 | 9.998 4350 | 17 | 20 |    |
|    | 50 | 8.928 3393 | 2473 | 8.929 9060 | 2492  | 1.070 0940 | 9.998 4333 | 18 | 10 |    |
| 52 | 0  | 8.928 5866 | 2472 | 8.930 1552 | 2490  | 1.069 8448 | 9.998 4315 | 18 | 0  | 8  |
|    | 10 | 8.928 8338 | 2471 | 8.930 4042 | 2488  | 1.069 5958 | 9.998 4297 | 18 | 50 |    |
|    | 20 | 8.929 0809 | 2470 | 8.930 6530 | 2488  | 1.069 3470 | 9.998 4279 | 18 | 40 |    |
|    | 30 | 8.929 3279 | 2467 | 8.930 9018 | 2486  | 1.069 0982 | 9.998 4261 | 18 | 30 |    |
|    | 40 | 8.929 5746 | 2467 | 8.931 1504 | 2484  | 1.068 8496 | 9.998 4243 | 18 | 20 |    |
|    | 50 | 8.929 8213 | 2465 | 8.931 3988 | 2483  | 1.068 6012 | 9.998 4225 | 18 | 10 |    |
| 53 | 0  | 8.930 0678 | 2464 | 8.931 6471 | 2482  | 1.068 3529 | 9.998 4207 | 18 | 0  | 7  |
|    | 10 | 8.930 3142 | 2462 | 8.931 8953 | 2480  | 1.068 1047 | 9.998 4189 | 18 | 50 |    |
|    | 20 | 8.930 5604 | 2461 | 8.932 1433 | 2479  | 1.067 8567 | 9.998 4171 | 18 | 40 |    |
|    | 30 | 8.930 8065 | 2459 | 8.932 3912 | 2478  | 1.067 6088 | 9.998 4153 | 18 | 30 |    |
|    | 40 | 8.931 0524 | 2459 | 8.932 6390 | 2476  | 1.067 3610 | 9.998 4135 | 18 | 20 |    |
|    | 50 | 8.931 2983 | 2456 | 8.932 8866 | 2474  | 1.067 1134 | 9.998 4117 | 18 | 10 |    |
| 54 | 0  | 8.931 5439 | 2456 | 8.933 1340 | 2474  | 1.066 8660 | 9.998 4099 | 18 | 0  | 6  |
|    | 10 | 8.931 7895 | 2453 | 8.933 3814 | 2472  | 1.066 6186 | 9.998 4081 | 18 | 50 |    |
|    | 20 | 8.932 0348 | 2453 | 8.933 6286 | 2470  | 1.066 3714 | 9.998 4063 | 18 | 40 |    |
|    | 30 | 8.932 2801 | 2451 | 8.933 8756 | 2470  | 1.066 1244 | 9.998 4045 | 19 | 30 |    |
|    | 40 | 8.932 5252 | 2450 | 8.934 1226 | 2467  | 1.065 8774 | 9.998 4026 | 18 | 20 |    |
|    | 50 | 8.932 7702 | 2448 | 8.934 3693 | 2467  | 1.065 6307 | 9.998 4008 | 18 | 10 |    |
| 55 | 0  | 8.933 0150 | 2447 | 8.934 6160 | 2465  | 1.065 3840 | 9.998 3990 | 18 | 0  | 5  |
|    | 10 | 8.933 2597 | 2445 | 8.934 8625 | 2463  | 1.065 1375 | 9.998 3972 | 18 | 50 |    |
|    | 20 | 8.933 5042 | 2445 | 8.935 1088 | 2463  | 1.064 8912 | 9.998 3954 | 18 | 40 |    |
|    | 30 | 8.933 7487 | 2442 | 8.935 3551 | 2461  | 1.064 6449 | 9.998 3936 | 18 | 30 |    |
|    | 40 | 8.933 9929 | 2442 | 8.935 6012 | 2459  | 1.064 3988 | 9.998 3918 | 18 | 20 |    |
|    | 50 | 8.934 2371 | 2440 | 8.935 8471 | 2458  | 1.064 1529 | 9.998 3900 | 19 | 10 |    |
| 56 | 0  | 8.934 4811 | 2438 | 8.936 0929 | 2457  | 1.063 9071 | 9.998 3881 | 18 | 0  | 4  |
|    | 10 | 8.934 7249 | 2438 | 8.936 3386 | 2456  | 1.063 6614 | 9.998 3863 | 18 | 50 |    |
|    | 20 | 8.934 9687 | 2435 | 8.936 5842 | 2454  | 1.063 4158 | 9.998 3845 | 18 | 40 |    |
|    | 30 | 8.935 2122 | 2435 | 8.936 8296 | 2452  | 1.063 1704 | 9.998 3827 | 18 | 30 |    |
|    | 40 | 8.935 4557 | 2433 | 8.937 0748 | 2452  | 1.062 9252 | 9.998 3809 | 19 | 20 |    |
|    | 50 | 8.935 6990 | 2432 | 8.937 3200 | 2450  | 1.062 6800 | 9.998 3790 | 18 | 10 |    |
| 57 | 0  | 8.935 9422 | 2430 | 8.937 5650 | 2448  | 1.062 4350 | 9.998 3772 | 18 | 0  | 3  |
|    | 10 | 8.936 1852 | 2429 | 8.937 8098 | 2447  | 1.062 1902 | 9.998 3754 | 18 | 50 |    |
|    | 20 | 8.936 4281 | 2428 | 8.938 0545 | 2446  | 1.061 9455 | 9.998 3736 | 19 | 40 |    |
|    | 30 | 8.936 6709 | 2426 | 8.938 2991 | 2445  | 1.061 7009 | 9.998 3717 | 18 | 30 |    |
|    | 40 | 8.936 9135 | 2425 | 8.938 5436 | 2443  | 1.061 4564 | 9.998 3699 | 18 | 20 |    |
|    | 50 | 8.937 1560 | 2423 | 8.938 7879 | 2442  | 1.061 2121 | 9.998 3681 | 18 | 10 |    |
| 58 | 0  | 8.937 3983 | 2423 | 8.939 0321 | 2440  | 1.060 9679 | 9.998 3663 | 19 | 0  | 2  |
|    | 10 | 8.937 6406 | 2420 | 8.939 2761 | 2439  | 1.060 7239 | 9.998 3644 | 19 | 50 |    |
|    | 20 | 8.937 8826 | 2420 | 8.939 5200 | 2438  | 1.060 4800 | 9.998 3626 | 18 | 40 |    |
|    | 30 | 8.938 1246 | 2418 | 8.939 7638 | 2437  | 1.060 2362 | 9.998 3608 | 19 | 30 |    |
|    | 40 | 8.938 3664 | 2417 | 8.940 0075 | 2435  | 1.059 9925 | 9.998 3589 | 18 | 20 |    |
|    | 50 | 8.938 6081 | 2415 | 8.940 2510 | 2434  | 1.059 7490 | 9.998 3571 | 18 | 10 |    |
| 59 | 0  | 8.938 8496 | 2414 | 8.940 4944 | 2432  | 1.059 5056 | 9.998 3553 | 19 | 0  | 1  |
|    | 10 | 8.939 0910 | 2413 | 8.940 7376 | 2431  | 1.059 2624 | 9.998 3534 | 18 | 50 |    |
|    | 20 | 8.939 3323 | 2411 | 8.940 9807 | 2430  | 1.059 0193 | 9.998 3516 | 19 | 40 |    |
|    | 30 | 8.939 5734 | 2410 | 8.941 2237 | 2428  | 1.058 7763 | 9.998 3497 | 18 | 30 |    |
|    | 40 | 8.939 8147 | 2409 | 8.941 4665 | 2427  | 1.058 5335 | 9.998 3479 | 18 | 20 |    |
|    | 50 | 8.940 0553 | 2407 | 8.941 7092 | 2426  | 1.058 2908 | 9.998 3461 | 19 | 10 |    |
| 60 | 0  | 8.940 2960 |      | 8.941 9518 |       | 1.058 0482 | 9.998 3442 |    | 0  | 0  |
|    | "  | Cos        | d.   | Cotg       | d. c. | Tang       | Sin        | d. | "  |    |



|        |    | Sin        | d.   | Tang       | d. c. | Cotg       | Cos        | d. |    |    |
|--------|----|------------|------|------------|-------|------------|------------|----|----|----|
| 2410   | 0  | 8.940 2960 | 2406 | 8.941 9518 | 2424  | 1.058 0482 | 9.998 3442 | 18 | 0  | 60 |
| 1 241  | 10 | 8.940 5366 | 2405 | 8.942 1942 | 2423  | 1.057 8058 | 9.998 3424 | 19 | 50 |    |
| 2 482  | 20 | 8.940 7771 | 2403 | 8.942 4365 | 2422  | 1.057 5635 | 9.998 3405 | 18 | 40 |    |
| 3 723  | 30 | 8.941 0174 | 2402 | 8.942 6787 | 2420  | 1.057 3213 | 9.998 3387 | 19 | 30 |    |
| 4 964  | 40 | 8.941 2576 | 2400 | 8.942 9207 | 2419  | 1.057 0793 | 9.998 3368 | 18 | 20 |    |
| 5 1205 | 50 | 8.941 4976 | 2400 | 8.943 1626 | 2418  | 1.056 8374 | 9.998 3350 | 18 | 10 |    |
| 6 1446 | 1  | 8.941 7376 | 2398 | 8.943 4044 | 2417  | 1.056 5956 | 9.998 3332 | 19 | 0  | 59 |
| 7 1687 | 10 | 8.941 9774 | 2396 | 8.943 6461 | 2415  | 1.056 3539 | 9.998 3313 | 18 | 50 |    |
| 8 1928 | 20 | 8.942 2170 | 2395 | 8.943 8876 | 2413  | 1.056 1124 | 9.998 3295 | 19 | 40 |    |
| 9 2169 | 30 | 8.942 4565 | 2394 | 8.944 1289 | 2413  | 1.055 8711 | 9.998 3276 | 18 | 30 |    |
| 2400   | 40 | 8.942 6959 | 2393 | 8.944 3702 | 2411  | 1.055 6298 | 9.998 3258 | 19 | 20 |    |
| 1 240  | 50 | 8.942 9352 | 2391 | 8.944 6113 | 2410  | 1.055 3887 | 9.998 3239 | 19 | 10 |    |
| 2 480  | 2  | 8.943 1743 | 2390 | 8.944 8523 | 2408  | 1.055 1477 | 9.998 3220 | 18 | 0  | 58 |
| 3 720  | 10 | 8.943 4133 | 2389 | 8.945 0931 | 2407  | 1.054 9069 | 9.998 3202 | 19 | 50 |    |
| 4 960  | 20 | 8.943 6522 | 2387 | 8.945 3338 | 2406  | 1.054 6662 | 9.998 3183 | 18 | 40 |    |
| 5 1200 | 30 | 8.943 8909 | 2386 | 8.945 5744 | 2405  | 1.054 4256 | 9.998 3165 | 19 | 30 |    |
| 6 1440 | 40 | 8.944 1295 | 2385 | 8.945 8149 | 2403  | 1.054 1851 | 9.998 3146 | 18 | 20 |    |
| 7 1680 | 50 | 8.944 3680 | 2383 | 8.946 0552 | 2402  | 1.053 9448 | 9.998 3128 | 19 | 10 |    |
| 8 1920 | 3  | 8.944 6063 | 2382 | 8.946 2954 | 2401  | 1.053 7046 | 9.998 3109 | 19 | 0  | 57 |
| 9 2160 | 10 | 8.944 8445 | 2381 | 8.946 5355 | 2399  | 1.053 4645 | 9.998 3090 | 18 | 50 |    |
| 2390   | 20 | 8.945 0826 | 2379 | 8.946 7754 | 2398  | 1.053 2246 | 9.998 3072 | 19 | 40 |    |
| 1 239  | 30 | 8.945 3205 | 2378 | 8.947 0152 | 2397  | 1.052 9848 | 9.998 3053 | 18 | 30 |    |
| 2 478  | 40 | 8.945 5583 | 2377 | 8.947 2549 | 2395  | 1.052 7451 | 9.998 3035 | 19 | 20 |    |
| 3 717  | 50 | 8.945 7960 | 2375 | 8.947 4944 | 2394  | 1.052 5056 | 9.998 3016 | 19 | 10 |    |
| 4 956  | 4  | 8.946 0335 | 2374 | 8.947 7338 | 2393  | 1.052 2662 | 9.998 2997 | 18 | 0  | 56 |
| 5 1195 | 10 | 8.946 2709 | 2373 | 8.947 9731 | 2391  | 1.052 0269 | 9.998 2979 | 19 | 50 |    |
| 6 1434 | 20 | 8.946 5082 | 2372 | 8.948 2122 | 2391  | 1.051 7878 | 9.998 2960 | 19 | 40 |    |
| 7 1673 | 30 | 8.946 7454 | 2370 | 8.948 4513 | 2389  | 1.051 5487 | 9.998 2941 | 19 | 30 |    |
| 8 1912 | 40 | 8.946 9824 | 2369 | 8.948 6902 | 2387  | 1.051 3098 | 9.998 2922 | 18 | 20 |    |
| 9 2151 | 50 | 8.947 2193 | 2368 | 8.948 9289 | 2387  | 1.051 0711 | 9.998 2904 | 19 | 10 |    |
| 2380   | 5  | 8.947 4561 | 2366 | 8.949 1676 | 2385  | 1.050 8324 | 9.998 2885 | 19 | 0  | 55 |
| 1 237  | 10 | 8.947 6927 | 2365 | 8.949 4061 | 2383  | 1.050 5939 | 9.998 2866 | 18 | 50 |    |
| 2 476  | 20 | 8.947 9292 | 2364 | 8.949 6444 | 2383  | 1.050 3556 | 9.998 2848 | 19 | 40 |    |
| 3 715  | 30 | 8.948 1656 | 2362 | 8.949 8827 | 2381  | 1.050 1173 | 9.998 2829 | 19 | 30 |    |
| 4 954  | 40 | 8.948 4018 | 2361 | 8.950 1208 | 2380  | 1.049 8792 | 9.998 2810 | 19 | 20 |    |
| 5 1193 | 50 | 8.948 6379 | 2360 | 8.950 3588 | 2379  | 1.049 6412 | 9.998 2791 | 19 | 10 |    |
| 6 1432 | 6  | 8.948 8739 | 2359 | 8.950 5967 | 2377  | 1.049 4033 | 9.998 2772 | 18 | 0  | 54 |
| 7 1671 | 10 | 8.949 1098 | 2357 | 8.950 8344 | 2376  | 1.049 1656 | 9.998 2754 | 19 | 50 |    |
| 8 1910 | 20 | 8.949 3455 | 2356 | 8.951 0720 | 2375  | 1.048 9280 | 9.998 2735 | 19 | 40 |    |
| 9 2149 | 30 | 8.949 5811 | 2354 | 8.951 3095 | 2373  | 1.048 6905 | 9.998 2716 | 19 | 30 |    |
| 2370   | 40 | 8.949 8165 | 2354 | 8.951 5468 | 2372  | 1.048 4532 | 9.998 2697 | 19 | 20 |    |
| 1 236  | 50 | 8.950 0519 | 2352 | 8.951 7840 | 2371  | 1.048 2160 | 9.998 2678 | 18 | 10 |    |
| 2 472  | 7  | 8.950 2871 | 2351 | 8.952 0211 | 2370  | 1.047 9789 | 9.998 2660 | 19 | 0  | 53 |
| 3 710  | 10 | 8.950 5222 | 2349 | 8.952 2581 | 2368  | 1.047 7419 | 9.998 2641 | 19 | 50 |    |
| 4 948  | 20 | 8.950 7571 | 2349 | 8.952 4949 | 2368  | 1.047 5051 | 9.998 2622 | 19 | 40 |    |
| 5 1186 | 30 | 8.950 9920 | 2347 | 8.952 7317 | 2365  | 1.047 2683 | 9.998 2603 | 19 | 30 |    |
| 6 1425 | 40 | 8.951 2267 | 2345 | 8.952 9682 | 2365  | 1.047 0318 | 9.998 2584 | 19 | 20 |    |
| 7 1664 | 50 | 8.951 4612 | 2345 | 8.953 2047 | 2363  | 1.046 7953 | 9.998 2565 | 19 | 10 |    |
| 8 1888 | 8  | 8.951 6957 | 2343 | 8.953 4410 | 2363  | 1.046 5590 | 9.998 2546 | 19 | 0  | 52 |
| 9 2124 | 10 | 8.951 9300 | 2342 | 8.953 6773 | 2360  | 1.046 3227 | 9.998 2527 | 19 | 50 |    |
| 2360   | 20 | 8.952 1642 | 2340 | 8.953 9133 | 2360  | 1.046 0867 | 9.998 2508 | 19 | 40 |    |
| 1 235  | 30 | 8.952 3982 | 2340 | 8.954 1493 | 2358  | 1.045 8507 | 9.998 2489 | 19 | 30 |    |
| 2 470  | 40 | 8.952 6322 | 2338 | 8.954 3851 | 2357  | 1.045 6149 | 9.998 2470 | 18 | 20 |    |
| 3 708  | 50 | 8.952 8660 | 2336 | 8.954 6208 | 2356  | 1.045 3792 | 9.998 2452 | 19 | 10 |    |
| 4 946  | 9  | 8.953 0996 | 2336 | 8.954 8564 | 2354  | 1.045 1436 | 9.998 2433 | 19 | 0  | 51 |
| 5 1180 | 10 | 8.953 3332 | 2334 | 8.955 0918 | 2354  | 1.044 9082 | 9.998 2414 | 19 | 50 |    |
| 6 1416 | 20 | 8.953 5666 | 2333 | 8.955 3272 | 2352  | 1.044 6728 | 9.998 2395 | 19 | 40 |    |
| 7 1653 | 30 | 8.953 7999 | 2332 | 8.955 5624 | 2350  | 1.044 4376 | 9.998 2376 | 19 | 30 |    |
| 8 1879 | 40 | 8.954 0331 | 2330 | 8.955 7974 | 2348  | 1.044 2026 | 9.998 2357 | 19 | 20 |    |
| 9 2115 | 50 | 8.954 2661 | 2330 | 8.956 0324 | 2348  | 1.043 9676 | 9.998 2338 | 19 | 10 |    |
| 2350   | 10 | 8.954 4991 | 2330 | 8.956 2672 | 2348  | 1.043 7328 | 9.998 2318 | 20 | 0  | 50 |
| 1 234  |    |            |      |            |       |            |            |    |    |    |
| 2 468  |    |            |      |            |       |            |            |    |    |    |
| 3 702  |    |            |      |            |       |            |            |    |    |    |
| 4 936  |    |            |      |            |       |            |            |    |    |    |
| 5 1170 |    |            |      |            |       |            |            |    |    |    |
| 6 1404 |    |            |      |            |       |            |            |    |    |    |
| 7 1638 |    |            |      |            |       |            |            |    |    |    |
| 8 1872 |    |            |      |            |       |            |            |    |    |    |
| 9 2106 |    |            |      |            |       |            |            |    |    |    |



|    | "  | Sin        | d.   | Tang       | d. c. | Cotg       | Cos        | d. | "  |    |
|----|----|------------|------|------------|-------|------------|------------|----|----|----|
| 10 | 0  | 8.954 4991 | 2328 | 8.956 2672 | 2347  | 1.043 7328 | 9.998 2318 | 19 | 0  | 50 |
|    | 10 | 8.954 7319 | 2326 | 8.956 5019 | 2346  | 1.043 4981 | 9.998 2299 | 19 | 50 |    |
|    | 20 | 8.954 9645 | 2326 | 8.956 7365 | 2344  | 1.043 2635 | 9.998 2280 | 19 | 40 |    |
|    | 30 | 8.955 1971 | 2324 | 8.956 9709 | 2344  | 1.043 0291 | 9.998 2261 | 19 | 30 |    |
|    | 40 | 8.955 4295 | 2323 | 8.957 2053 | 2342  | 1.042 7947 | 9.998 2242 | 19 | 20 |    |
|    | 50 | 8.955 6618 | 2322 | 8.957 4395 | 2340  | 1.042 5605 | 9.998 2223 | 19 | 10 |    |
| 11 | 0  | 8.955 8940 | 2320 | 8.957 6735 | 2340  | 1.042 3265 | 9.998 2204 | 19 | 0  | 49 |
|    | 10 | 8.956 1260 | 2319 | 8.957 9075 | 2338  | 1.042 0925 | 9.998 2185 | 19 | 50 |    |
|    | 20 | 8.956 3579 | 2318 | 8.958 1413 | 2337  | 1.041 8587 | 9.998 2166 | 19 | 40 |    |
|    | 30 | 8.956 5897 | 2317 | 8.958 3750 | 2336  | 1.041 6250 | 9.998 2147 | 19 | 30 |    |
|    | 40 | 8.956 8214 | 2315 | 8.958 6086 | 2335  | 1.041 3914 | 9.998 2128 | 20 | 20 |    |
|    | 50 | 8.957 0529 | 2314 | 8.958 8421 | 2333  | 1.041 1579 | 9.998 2108 | 19 | 10 |    |
| 12 | 0  | 8.957 2843 | 2313 | 8.959 0754 | 2332  | 1.040 9246 | 9.998 2089 | 19 | 0  | 48 |
|    | 10 | 8.957 5156 | 2312 | 8.959 3086 | 2331  | 1.040 6914 | 9.998 2070 | 19 | 50 |    |
|    | 20 | 8.957 7468 | 2311 | 8.959 5417 | 2330  | 1.040 4583 | 9.998 2051 | 19 | 40 |    |
|    | 30 | 8.957 9779 | 2309 | 8.959 7747 | 2328  | 1.040 2253 | 9.998 2032 | 19 | 30 |    |
|    | 40 | 8.958 2088 | 2308 | 8.960 0075 | 2327  | 1.039 9925 | 9.998 2013 | 20 | 20 |    |
|    | 50 | 8.958 4396 | 2307 | 8.960 2402 | 2326  | 1.039 7598 | 9.998 1993 | 19 | 10 |    |
| 13 | 0  | 8.958 6703 | 2305 | 8.960 4728 | 2325  | 1.039 5272 | 9.998 1974 | 19 | 0  | 47 |
|    | 10 | 8.958 9008 | 2304 | 8.960 7053 | 2324  | 1.039 2947 | 9.998 1955 | 19 | 50 |    |
|    | 20 | 8.959 1312 | 2303 | 8.960 9377 | 2322  | 1.039 0623 | 9.998 1936 | 20 | 40 |    |
|    | 30 | 8.959 3615 | 2302 | 8.961 1699 | 2321  | 1.038 8301 | 9.998 1916 | 19 | 30 |    |
|    | 40 | 8.959 5917 | 2301 | 8.961 4020 | 2320  | 1.038 5980 | 9.998 1897 | 19 | 20 |    |
|    | 50 | 8.959 8218 | 2299 | 8.961 6340 | 2319  | 1.038 3660 | 9.998 1878 | 19 | 10 |    |
| 14 | 0  | 8.960 0517 | 2298 | 8.961 8659 | 2317  | 1.038 1341 | 9.998 1859 | 20 | 0  | 46 |
|    | 10 | 8.960 2815 | 2297 | 8.962 0976 | 2316  | 1.037 9024 | 9.998 1839 | 19 | 50 |    |
|    | 20 | 8.960 5114 | 2296 | 8.962 3292 | 2315  | 1.037 6708 | 9.998 1820 | 19 | 40 |    |
|    | 30 | 8.960 7408 | 2294 | 8.962 5607 | 2314  | 1.037 4393 | 9.998 1801 | 20 | 30 |    |
|    | 40 | 8.960 9702 | 2294 | 8.962 7921 | 2313  | 1.037 2079 | 9.998 1781 | 19 | 20 |    |
|    | 50 | 8.961 1996 | 2292 | 8.963 0234 | 2311  | 1.036 9766 | 9.998 1762 | 19 | 10 |    |
| 15 | 0  | 8.961 4288 | 2291 | 8.963 2545 | 2310  | 1.036 7455 | 9.998 1743 | 20 | 0  | 45 |
|    | 10 | 8.961 6579 | 2289 | 8.963 4855 | 2309  | 1.036 5145 | 9.998 1723 | 19 | 50 |    |
|    | 20 | 8.961 8868 | 2288 | 8.963 7164 | 2308  | 1.036 2836 | 9.998 1704 | 19 | 40 |    |
|    | 30 | 8.962 1157 | 2287 | 8.963 9472 | 2306  | 1.036 0528 | 9.998 1685 | 20 | 30 |    |
|    | 40 | 8.962 3444 | 2286 | 8.964 1778 | 2306  | 1.035 8222 | 9.998 1665 | 19 | 20 |    |
|    | 50 | 8.962 5730 | 2284 | 8.964 4084 | 2304  | 1.035 5916 | 9.998 1646 | 20 | 10 |    |
| 16 | 0  | 8.962 8014 | 2284 | 8.964 6388 | 2303  | 1.035 3612 | 9.998 1626 | 19 | 0  | 44 |
|    | 10 | 8.963 0298 | 2282 | 8.964 8691 | 2302  | 1.035 1309 | 9.998 1607 | 19 | 50 |    |
|    | 20 | 8.963 2580 | 2281 | 8.965 0993 | 2300  | 1.034 9007 | 9.998 1588 | 20 | 40 |    |
|    | 30 | 8.963 4861 | 2280 | 8.965 3293 | 2299  | 1.034 6707 | 9.998 1568 | 19 | 30 |    |
|    | 40 | 8.963 7141 | 2279 | 8.965 5592 | 2299  | 1.034 4408 | 9.998 1549 | 20 | 20 |    |
|    | 50 | 8.963 9420 | 2277 | 8.965 7891 | 2297  | 1.034 2109 | 9.998 1529 | 19 | 10 |    |
| 17 | 0  | 8.964 1697 | 2277 | 8.966 0188 | 2295  | 1.033 9812 | 9.998 1510 | 20 | 0  | 43 |
|    | 10 | 8.964 3974 | 2275 | 8.966 2483 | 2295  | 1.033 7517 | 9.998 1490 | 19 | 50 |    |
|    | 20 | 8.964 6249 | 2274 | 8.966 4778 | 2293  | 1.033 5222 | 9.998 1471 | 20 | 40 |    |
|    | 30 | 8.964 8523 | 2272 | 8.966 7071 | 2292  | 1.033 2929 | 9.998 1451 | 19 | 30 |    |
|    | 40 | 8.965 0795 | 2272 | 8.966 9363 | 2291  | 1.033 0637 | 9.998 1432 | 20 | 20 |    |
|    | 50 | 8.965 3067 | 2270 | 8.967 1654 | 2290  | 1.032 8346 | 9.998 1412 | 19 | 10 |    |
| 18 | 0  | 8.965 5337 | 2269 | 8.967 3944 | 2289  | 1.032 6056 | 9.998 1393 | 20 | 0  | 42 |
|    | 10 | 8.965 7606 | 2268 | 8.967 6233 | 2287  | 1.032 3767 | 9.998 1373 | 19 | 50 |    |
|    | 20 | 8.965 9874 | 2267 | 8.967 8520 | 2287  | 1.032 1480 | 9.998 1354 | 20 | 40 |    |
|    | 30 | 8.966 2141 | 2265 | 8.968 0807 | 2285  | 1.031 9193 | 9.998 1334 | 19 | 30 |    |
|    | 40 | 8.966 4406 | 2265 | 8.968 3092 | 2284  | 1.031 6908 | 9.998 1315 | 20 | 20 |    |
|    | 50 | 8.966 6671 | 2263 | 8.968 5376 | 2282  | 1.031 4624 | 9.998 1295 | 20 | 10 |    |
| 19 | 0  | 8.966 8934 | 2262 | 8.968 7658 | 2282  | 1.031 2342 | 9.998 1275 | 19 | 0  | 41 |
|    | 10 | 8.967 1196 | 2260 | 8.968 9940 | 2280  | 1.031 0060 | 9.998 1256 | 20 | 50 |    |
|    | 20 | 8.967 3456 | 2260 | 8.969 2220 | 2279  | 1.030 7780 | 9.998 1236 | 19 | 40 |    |
|    | 30 | 8.967 5716 | 2260 | 8.969 4499 | 2278  | 1.030 5501 | 9.998 1217 | 20 | 30 |    |
|    | 40 | 8.967 7974 | 2257 | 8.969 6777 | 2277  | 1.030 3223 | 9.998 1197 | 20 | 20 |    |
|    | 50 | 8.968 0231 | 2256 | 8.969 9054 | 2276  | 1.030 0946 | 9.998 1177 | 19 | 10 |    |
| 20 | 0  | 8.968 2487 | 2256 | 8.970 1330 | 2276  | 1.029 8670 | 9.998 1158 | 20 | 0  | 40 |
|    | "  | Con        | d.   | Cotg       | d. c. | Tang       | Sin        | d. | "  |    |



2270  
1 127  
2 454  
3 681  
4 908  
5 1135  
6 1363  
7 1589  
8 1816  
9 2043

2260  
1 126  
2 452  
3 678  
4 904  
5 1130  
6 1356  
7 1582  
8 1808  
9 2034

2250  
1 125  
2 450  
3 675  
4 900  
5 1125  
6 1350  
7 1575  
8 1800  
9 2025

2240  
1 124  
2 448  
3 672  
4 896  
5 1120  
6 1344  
7 1568  
8 1792  
9 2016

2230  
1 123  
2 446  
3 669  
4 892  
5 1115  
6 1338  
7 1561  
8 1784  
9 2007

2220  
1 122  
2 444  
3 666  
4 888  
5 1110  
6 1332  
7 1554  
8 1776  
9 1998

2210  
1 121  
2 442  
3 663  
4 884  
5 1105  
6 1326  
7 1547  
8 1768  
9 1989

2200  
1 120  
2 440  
3 660  
4 880  
5 1100  
6 1320  
7 1540  
8 1760  
9 1980

|    | n  | Sin        | d.   | Tang       | d. c. | Cotg       | Cos        | d. | n  | i  |
|----|----|------------|------|------------|-------|------------|------------|----|----|----|
| 20 | 0  | 8.968 2487 | 2255 | 8.970 1330 | 2274  | 1.029 8670 | 9.998 1158 | 20 | 0  | 40 |
|    | 10 | 8.968 4742 | 2254 | 8.970 3604 | 2274  | 1.029 6396 | 9.998 1138 | 20 | 50 |    |
|    | 20 | 8.968 6996 | 2252 | 8.970 5878 | 2272  | 1.029 4122 | 9.998 1118 | 20 | 40 |    |
|    | 30 | 8.968 9248 | 2252 | 8.970 8150 | 2271  | 1.029 1850 | 9.998 1099 | 19 | 30 |    |
|    | 40 | 8.969 1500 | 2250 | 8.971 0421 | 2270  | 1.028 9579 | 9.998 1079 | 20 | 20 |    |
|    | 50 | 8.969 3750 | 2249 | 8.971 2691 | 2268  | 1.028 7309 | 9.998 1059 | 20 | 10 |    |
| 21 | 0  | 8.969 5999 | 2247 | 8.971 4959 | 2268  | 1.028 5041 | 9.998 1040 | 19 | 0  | 39 |
|    | 10 | 8.969 8246 | 2247 | 8.971 7227 | 2266  | 1.028 2773 | 9.998 1020 | 20 | 50 |    |
|    | 20 | 8.970 0493 | 2245 | 8.971 9493 | 2265  | 1.028 0507 | 9.998 1000 | 20 | 40 |    |
|    | 30 | 8.970 2738 | 2245 | 8.972 1758 | 2264  | 1.027 8242 | 9.998 0980 | 19 | 30 |    |
|    | 40 | 8.970 4983 | 2243 | 8.972 4022 | 2263  | 1.027 5978 | 9.998 0961 | 20 | 20 |    |
|    | 50 | 8.970 7226 | 2242 | 8.972 6285 | 2262  | 1.027 3715 | 9.998 0941 | 20 | 10 |    |
| 22 | 0  | 8.970 9468 | 2240 | 8.972 8547 | 2260  | 1.027 1453 | 9.998 0921 | 20 | 0  | 38 |
|    | 10 | 8.971 1708 | 2240 | 8.973 0807 | 2260  | 1.026 9193 | 9.998 0901 | 20 | 50 |    |
|    | 20 | 8.971 3948 | 2238 | 8.973 3067 | 2258  | 1.026 6933 | 9.998 0881 | 20 | 40 |    |
|    | 30 | 8.971 6186 | 2238 | 8.973 5325 | 2257  | 1.026 4675 | 9.998 0862 | 19 | 30 |    |
|    | 40 | 8.971 8424 | 2236 | 8.973 7582 | 2256  | 1.026 2418 | 9.998 0842 | 20 | 20 |    |
|    | 50 | 8.972 0660 | 2235 | 8.973 9838 | 2254  | 1.026 0162 | 9.998 0822 | 20 | 10 |    |
| 23 | 0  | 8.972 2895 | 2233 | 8.974 2092 | 2254  | 1.025 7908 | 9.998 0802 | 20 | 0  | 37 |
|    | 10 | 8.972 5128 | 2233 | 8.974 4346 | 2253  | 1.025 5654 | 9.998 0782 | 20 | 50 |    |
|    | 20 | 8.972 7361 | 2231 | 8.974 6599 | 2251  | 1.025 3401 | 9.998 0762 | 20 | 40 |    |
|    | 30 | 8.972 9592 | 2231 | 8.974 8850 | 2250  | 1.025 1150 | 9.998 0743 | 19 | 30 |    |
|    | 40 | 8.973 1823 | 2229 | 8.975 1100 | 2249  | 1.024 8900 | 9.998 0723 | 20 | 20 |    |
|    | 50 | 8.973 4052 | 2228 | 8.975 3349 | 2248  | 1.024 6651 | 9.998 0703 | 20 | 10 |    |
| 24 | 0  | 8.973 6280 | 2227 | 8.975 5597 | 2247  | 1.024 4403 | 9.998 0683 | 20 | 0  | 36 |
|    | 10 | 8.973 8507 | 2225 | 8.975 7844 | 2245  | 1.024 2156 | 9.998 0663 | 20 | 50 |    |
|    | 20 | 8.974 0732 | 2225 | 8.976 0089 | 2245  | 1.023 9911 | 9.998 0643 | 20 | 40 |    |
|    | 30 | 8.974 2957 | 2223 | 8.976 2334 | 2243  | 1.023 7666 | 9.998 0623 | 20 | 30 |    |
|    | 40 | 8.974 5180 | 2223 | 8.976 4577 | 2242  | 1.023 5423 | 9.998 0603 | 20 | 20 |    |
|    | 50 | 8.974 7403 | 2221 | 8.976 6819 | 2241  | 1.023 3181 | 9.998 0583 | 20 | 10 |    |
| 25 | 0  | 8.974 9624 | 2220 | 8.976 9060 | 2240  | 1.023 0940 | 9.998 0563 | 20 | 0  | 35 |
|    | 10 | 8.975 1844 | 2218 | 8.977 1300 | 2239  | 1.022 8700 | 9.998 0543 | 20 | 50 |    |
|    | 20 | 8.975 4062 | 2218 | 8.977 3539 | 2238  | 1.022 6461 | 9.998 0523 | 20 | 40 |    |
|    | 30 | 8.975 6280 | 2217 | 8.977 5777 | 2236  | 1.022 4223 | 9.998 0503 | 20 | 30 |    |
|    | 40 | 8.975 8497 | 2215 | 8.977 8013 | 2235  | 1.022 1987 | 9.998 0483 | 20 | 20 |    |
|    | 50 | 8.976 0712 | 2214 | 8.978 0248 | 2235  | 1.021 9752 | 9.998 0463 | 20 | 10 |    |
| 26 | 0  | 8.976 2926 | 2213 | 8.978 2483 | 2233  | 1.021 7517 | 9.998 0443 | 20 | 0  | 34 |
|    | 10 | 8.976 5139 | 2212 | 8.978 4716 | 2232  | 1.021 5284 | 9.998 0423 | 20 | 50 |    |
|    | 20 | 8.976 7351 | 2211 | 8.978 6948 | 2231  | 1.021 3052 | 9.998 0403 | 20 | 40 |    |
|    | 30 | 8.976 9562 | 2210 | 8.978 9179 | 2229  | 1.021 0821 | 9.998 0383 | 20 | 30 |    |
|    | 40 | 8.977 1772 | 2208 | 8.979 1408 | 2229  | 1.020 8592 | 9.998 0363 | 20 | 20 |    |
|    | 50 | 8.977 3980 | 2208 | 8.979 3637 | 2228  | 1.020 6363 | 9.998 0343 | 20 | 10 |    |
| 27 | 0  | 8.977 6188 | 2206 | 8.979 5865 | 2226  | 1.020 4135 | 9.998 0323 | 20 | 0  | 33 |
|    | 10 | 8.977 8394 | 2205 | 8.979 8091 | 2225  | 1.020 1909 | 9.998 0303 | 20 | 50 |    |
|    | 20 | 8.978 0599 | 2204 | 8.980 0316 | 2224  | 1.019 9684 | 9.998 0283 | 20 | 40 |    |
|    | 30 | 8.978 2803 | 2203 | 8.980 2540 | 2223  | 1.019 7460 | 9.998 0263 | 20 | 30 |    |
|    | 40 | 8.978 5006 | 2202 | 8.980 4763 | 2222  | 1.019 5237 | 9.998 0243 | 21 | 20 |    |
|    | 50 | 8.978 7208 | 2200 | 8.980 6985 | 2221  | 1.019 3015 | 9.998 0222 | 20 | 10 |    |
| 28 | 0  | 8.978 9408 | 2200 | 8.980 9206 | 2220  | 1.019 0794 | 9.998 0202 | 20 | 0  | 32 |
|    | 10 | 8.979 1608 | 2198 | 8.981 1426 | 2218  | 1.018 8574 | 9.998 0182 | 20 | 50 |    |
|    | 20 | 8.979 3806 | 2198 | 8.981 3644 | 2218  | 1.018 6356 | 9.998 0162 | 20 | 40 |    |
|    | 30 | 8.979 6004 | 2196 | 8.981 5862 | 2216  | 1.018 4138 | 9.998 0142 | 20 | 30 |    |
|    | 40 | 8.979 8200 | 2195 | 8.981 8078 | 2215  | 1.018 1922 | 9.998 0122 | 21 | 20 |    |
|    | 50 | 8.980 0395 | 2194 | 8.982 0293 | 2214  | 1.017 9707 | 9.998 0101 | 20 | 10 |    |
| 29 | 0  | 8.980 2589 | 2192 | 8.982 2507 | 2213  | 1.017 7493 | 9.998 0081 | 20 | 0  | 31 |
|    | 10 | 8.980 4781 | 2192 | 8.982 4720 | 2212  | 1.017 5280 | 9.998 0061 | 20 | 50 |    |
|    | 20 | 8.980 6973 | 2191 | 8.982 6932 | 2211  | 1.017 3068 | 9.998 0041 | 20 | 40 |    |
|    | 30 | 8.980 9164 | 2189 | 8.982 9143 | 2210  | 1.017 0857 | 9.998 0021 | 21 | 30 |    |
|    | 40 | 8.981 1353 | 2188 | 8.983 1353 | 2208  | 1.016 8647 | 9.998 0000 | 20 | 20 |    |
|    | 50 | 8.981 3541 | 2188 | 8.983 3561 | 2208  | 1.016 6439 | 9.997 9980 | 20 | 10 |    |
| 30 | 0  | 8.981 5729 | 2188 | 8.983 5769 | 2208  | 1.016 4231 | 9.997 9960 | 20 | 0  | 30 |
|    |    | Cos        | d.   | Cotg       | d. c. | Tang       | Sin        | d. | n  | i  |



| "  | Sin          | d.   | Tang       | d. c. | Cotg       | Cos        | d. | "  | "  |
|----|--------------|------|------------|-------|------------|------------|----|----|----|
| 30 | 0 8.981 5729 | 2186 | 8.983 5769 | 2206  | 1.016 4231 | 9.997 9960 | 21 | 0  | 30 |
| 10 | 8.981 7915   | 2185 | 8.983 7975 | 2206  | 1.016 2025 | 9.997 9939 | 20 | 50 |    |
| 20 | 8.982 0100   | 2184 | 8.984 0181 | 2204  | 1.015 9819 | 9.997 9919 | 20 | 40 |    |
| 30 | 8.982 2284   | 2182 | 8.984 2385 | 2203  | 1.015 7615 | 9.997 9899 | 20 | 30 |    |
| 40 | 8.982 4466   | 2182 | 8.984 4588 | 2202  | 1.015 5412 | 9.997 9879 | 21 | 20 |    |
| 50 | 8.982 6648   | 2181 | 8.984 6790 | 2201  | 1.015 3210 | 9.997 9858 | 21 | 10 |    |
| 31 | 0 8.982 8829 | 2179 | 8.984 8991 | 2200  | 1.015 1009 | 9.997 9838 | 20 | 0  | 29 |
| 10 | 8.983 1008   | 2179 | 8.985 1191 | 2198  | 1.014 8809 | 9.997 9818 | 21 | 50 |    |
| 20 | 8.983 3187   | 2179 | 8.985 3389 | 2198  | 1.014 6611 | 9.997 9797 | 21 | 40 |    |
| 30 | 8.983 5364   | 2177 | 8.985 5587 | 2196  | 1.014 4413 | 9.997 9777 | 20 | 30 |    |
| 40 | 8.983 7540   | 2176 | 8.985 7783 | 2196  | 1.014 2217 | 9.997 9757 | 21 | 20 |    |
| 50 | 8.983 9715   | 2175 | 8.985 9979 | 2194  | 1.014 0021 | 9.997 9736 | 21 | 10 |    |
| 32 | 0 8.984 1889 | 2173 | 8.986 2173 | 2194  | 1.013 7827 | 9.997 9716 | 21 | 0  | 28 |
| 10 | 8.984 4062   | 2172 | 8.986 4367 | 2192  | 1.013 5633 | 9.997 9695 | 20 | 50 |    |
| 20 | 8.984 6234   | 2170 | 8.986 6559 | 2191  | 1.013 3441 | 9.997 9675 | 20 | 40 |    |
| 30 | 8.984 8404   | 2170 | 8.986 8750 | 2190  | 1.013 1250 | 9.997 9655 | 21 | 30 |    |
| 40 | 8.985 0574   | 2168 | 8.987 0940 | 2189  | 1.012 9060 | 9.997 9634 | 21 | 20 |    |
| 50 | 8.985 2742   | 2168 | 8.987 3129 | 2188  | 1.012 6871 | 9.997 9614 | 21 | 10 |    |
| 33 | 0 8.985 4910 | 2166 | 8.987 5317 | 2186  | 1.012 4683 | 9.997 9593 | 20 | 0  | 27 |
| 10 | 8.985 7076   | 2165 | 8.987 7503 | 2186  | 1.012 2497 | 9.997 9573 | 21 | 50 |    |
| 20 | 8.985 9241   | 2164 | 8.987 9689 | 2185  | 1.012 0311 | 9.997 9552 | 21 | 40 |    |
| 30 | 8.986 1405   | 2163 | 8.988 1874 | 2183  | 1.011 8126 | 9.997 9532 | 21 | 30 |    |
| 40 | 8.986 3568   | 2162 | 8.988 4057 | 2183  | 1.011 5943 | 9.997 9511 | 21 | 20 |    |
| 50 | 8.986 5730   | 2161 | 8.988 6240 | 2181  | 1.011 3760 | 9.997 9491 | 21 | 10 |    |
| 34 | 0 8.986 7891 | 2160 | 8.988 8421 | 2180  | 1.011 1579 | 9.997 9470 | 20 | 0  | 26 |
| 10 | 8.987 0051   | 2159 | 8.989 0601 | 2179  | 1.010 9399 | 9.997 9450 | 21 | 50 |    |
| 20 | 8.987 2210   | 2157 | 8.989 2780 | 2179  | 1.010 7220 | 9.997 9429 | 21 | 40 |    |
| 30 | 8.987 4367   | 2157 | 8.989 4959 | 2177  | 1.010 5041 | 9.997 9409 | 21 | 30 |    |
| 40 | 8.987 6524   | 2155 | 8.989 7136 | 2176  | 1.010 2864 | 9.997 9388 | 21 | 20 |    |
| 50 | 8.987 8679   | 2155 | 8.989 9312 | 2175  | 1.010 0688 | 9.997 9368 | 21 | 10 |    |
| 35 | 0 8.988 0834 | 2153 | 8.990 1487 | 2174  | 1.009 8513 | 9.997 9347 | 21 | 0  | 25 |
| 10 | 8.988 2987   | 2152 | 8.990 3661 | 2172  | 1.009 6339 | 9.997 9326 | 20 | 50 |    |
| 20 | 8.988 5139   | 2151 | 8.990 5833 | 2172  | 1.009 4167 | 9.997 9306 | 21 | 40 |    |
| 30 | 8.988 7290   | 2150 | 8.990 8005 | 2171  | 1.009 1995 | 9.997 9285 | 20 | 30 |    |
| 40 | 8.988 9440   | 2149 | 8.991 0176 | 2169  | 1.008 9824 | 9.997 9265 | 21 | 20 |    |
| 50 | 8.989 1589   | 2148 | 8.991 2345 | 2169  | 1.008 7655 | 9.997 9244 | 21 | 10 |    |
| 36 | 0 8.989 3737 | 2147 | 8.991 4514 | 2167  | 1.008 5486 | 9.997 9223 | 20 | 0  | 24 |
| 10 | 8.989 5884   | 2146 | 8.991 6681 | 2167  | 1.008 3319 | 9.997 9203 | 21 | 50 |    |
| 20 | 8.989 8030   | 2144 | 8.991 8848 | 2165  | 1.008 1152 | 9.997 9182 | 21 | 40 |    |
| 30 | 8.990 0174   | 2144 | 8.992 1013 | 2165  | 1.007 8987 | 9.997 9161 | 20 | 30 |    |
| 40 | 8.990 2318   | 2143 | 8.992 3178 | 2163  | 1.007 6822 | 9.997 9141 | 21 | 20 |    |
| 50 | 8.990 4461   | 2141 | 8.992 5341 | 2162  | 1.007 4659 | 9.997 9120 | 21 | 10 |    |
| 37 | 0 8.990 6602 | 2141 | 8.992 7503 | 2161  | 1.007 2497 | 9.997 9099 | 21 | 0  | 23 |
| 10 | 8.990 8743   | 2139 | 8.992 9664 | 2160  | 1.007 0336 | 9.997 9078 | 20 | 50 |    |
| 20 | 8.991 0882   | 2138 | 8.993 1824 | 2159  | 1.006 8176 | 9.997 9058 | 21 | 40 |    |
| 30 | 8.991 3020   | 2138 | 8.993 3983 | 2158  | 1.006 6017 | 9.997 9037 | 21 | 30 |    |
| 40 | 8.991 5158   | 2136 | 8.993 6141 | 2157  | 1.006 3859 | 9.997 9016 | 20 | 20 |    |
| 50 | 8.991 7294   | 2135 | 8.993 8298 | 2156  | 1.006 1702 | 9.997 8996 | 21 | 10 |    |
| 38 | 0 8.991 9429 | 2134 | 8.994 0454 | 2155  | 1.005 9546 | 9.997 8975 | 21 | 0  | 22 |
| 10 | 8.992 1563   | 2133 | 8.994 2609 | 2154  | 1.005 7391 | 9.997 8954 | 21 | 50 |    |
| 20 | 8.992 3696   | 2132 | 8.994 4763 | 2152  | 1.005 5237 | 9.997 8933 | 21 | 40 |    |
| 30 | 8.992 5828   | 2131 | 8.994 6915 | 2152  | 1.005 3085 | 9.997 8912 | 20 | 30 |    |
| 40 | 8.992 7959   | 2130 | 8.994 9067 | 2151  | 1.005 0933 | 9.997 8892 | 20 | 20 |    |
| 50 | 8.993 0089   | 2128 | 8.995 1218 | 2149  | 1.004 8782 | 9.997 8871 | 21 | 10 |    |
| 39 | 0 8.993 2217 | 2128 | 8.995 3367 | 2149  | 1.004 6633 | 9.997 8850 | 21 | 0  | 21 |
| 10 | 8.993 4345   | 2127 | 8.995 5516 | 2147  | 1.004 4484 | 9.997 8829 | 21 | 50 |    |
| 20 | 8.993 6472   | 2125 | 8.995 7663 | 2147  | 1.004 2337 | 9.997 8808 | 21 | 40 |    |
| 30 | 8.993 8597   | 2125 | 8.995 9810 | 2145  | 1.004 0190 | 9.997 8787 | 20 | 30 |    |
| 40 | 8.994 0722   | 2123 | 8.996 1955 | 2145  | 1.003 8045 | 9.997 8767 | 20 | 20 |    |
| 50 | 8.994 2845   | 2123 | 8.996 4100 | 2143  | 1.003 5900 | 9.997 8746 | 21 | 10 |    |
| 40 | 0 8.994 4968 |      | 8.996 6243 |       | 1.003 3757 | 9.997 8725 |    | 0  | 20 |
| "  | Cos          | d.   | Cotg       | d. c. | Tang       | Sin        | d. | "  | "  |

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| i  | n  | Sta        | d.   | Tang       | d. c. | Cotg       | Con        | d. | n  | i  |
|----|----|------------|------|------------|-------|------------|------------|----|----|----|
| 40 | 0  | 8.994 4968 | 2121 | 8.996 6243 | 2143  | 1.000 1157 | 9.997 8725 | 21 | 0  | 20 |
|    | 10 | 8.994 7089 | 2121 | 8.996 8485 | 2143  | 1.000 1664 | 9.997 8725 | 21 | 50 |    |
|    | 20 | 8.994 9210 | 2121 | 8.997 0727 | 2143  | 1.000 2171 | 9.997 8725 | 21 | 40 |    |
|    | 30 | 8.995 1329 | 2121 | 8.997 2969 | 2143  | 1.000 2678 | 9.997 8725 | 21 | 30 |    |
|    | 40 | 8.995 3447 | 2121 | 8.997 5211 | 2143  | 1.000 3185 | 9.997 8725 | 21 | 20 |    |
|    | 50 | 8.995 5565 | 2121 | 8.997 7453 | 2143  | 1.000 3692 | 9.997 8725 | 21 | 10 |    |
| 41 | 0  | 8.995 7684 | 2121 | 8.997 9695 | 2143  | 1.000 4199 | 9.997 8725 | 21 | 0  | 19 |
|    | 10 | 8.995 9796 | 2121 | 8.998 1937 | 2143  | 1.000 4706 | 9.997 8725 | 21 | 50 |    |
|    | 20 | 8.996 1910 | 2121 | 8.998 4179 | 2143  | 1.000 5213 | 9.997 8725 | 21 | 40 |    |
|    | 30 | 8.996 4023 | 2121 | 8.998 6421 | 2143  | 1.000 5720 | 9.997 8725 | 21 | 30 |    |
|    | 40 | 8.996 6135 | 2121 | 8.998 8663 | 2143  | 1.000 6227 | 9.997 8725 | 21 | 20 |    |
|    | 50 | 8.996 8246 | 2121 | 8.999 0905 | 2143  | 1.000 6734 | 9.997 8725 | 21 | 10 |    |
| 42 | 0  | 8.997 0356 | 2121 | 8.999 3147 | 2143  | 1.000 7241 | 9.997 8725 | 21 | 0  | 18 |
|    | 10 | 8.997 2469 | 2121 | 8.999 5389 | 2143  | 1.000 7748 | 9.997 8725 | 21 | 50 |    |
|    | 20 | 8.997 4577 | 2121 | 8.999 7631 | 2143  | 1.000 8255 | 9.997 8725 | 21 | 40 |    |
|    | 30 | 8.997 6680 | 2121 | 8.999 9873 | 2143  | 1.000 8762 | 9.997 8725 | 21 | 30 |    |
|    | 40 | 8.997 8786 | 2121 | 9.000 2115 | 2143  | 1.000 9269 | 9.997 8725 | 21 | 20 |    |
|    | 50 | 8.998 0891 | 2121 | 9.000 4357 | 2143  | 1.000 9776 | 9.997 8725 | 21 | 10 |    |
| 43 | 0  | 8.998 2994 | 2121 | 9.000 6599 | 2143  | 1.001 0283 | 9.997 8725 | 21 | 0  | 17 |
|    | 10 | 8.998 5097 | 2121 | 9.000 8841 | 2143  | 1.001 0790 | 9.997 8725 | 21 | 50 |    |
|    | 20 | 8.998 7199 | 2121 | 9.001 1083 | 2143  | 1.001 1297 | 9.997 8725 | 21 | 40 |    |
|    | 30 | 8.998 9302 | 2121 | 9.001 3325 | 2143  | 1.001 1804 | 9.997 8725 | 21 | 30 |    |
|    | 40 | 8.999 1405 | 2121 | 9.001 5567 | 2143  | 1.001 2311 | 9.997 8725 | 21 | 20 |    |
|    | 50 | 8.999 3508 | 2121 | 9.001 7809 | 2143  | 1.001 2818 | 9.997 8725 | 21 | 10 |    |
| 44 | 0  | 8.999 5611 | 2121 | 9.002 0051 | 2143  | 1.001 3325 | 9.997 8725 | 21 | 0  | 16 |
|    | 10 | 8.999 7714 | 2121 | 9.002 2293 | 2143  | 1.001 3832 | 9.997 8725 | 21 | 50 |    |
|    | 20 | 8.999 9817 | 2121 | 9.002 4535 | 2143  | 1.001 4339 | 9.997 8725 | 21 | 40 |    |
|    | 30 | 9.000 1920 | 2121 | 9.002 6777 | 2143  | 1.001 4846 | 9.997 8725 | 21 | 30 |    |
|    | 40 | 9.000 4023 | 2121 | 9.002 9019 | 2143  | 1.001 5353 | 9.997 8725 | 21 | 20 |    |
|    | 50 | 9.000 6126 | 2121 | 9.003 1261 | 2143  | 1.001 5860 | 9.997 8725 | 21 | 10 |    |
| 45 | 0  | 9.000 8229 | 2121 | 9.003 3503 | 2143  | 1.001 6367 | 9.997 8725 | 21 | 0  | 15 |
|    | 10 | 9.001 0332 | 2121 | 9.003 5745 | 2143  | 1.001 6874 | 9.997 8725 | 21 | 50 |    |
|    | 20 | 9.001 2435 | 2121 | 9.003 7987 | 2143  | 1.001 7381 | 9.997 8725 | 21 | 40 |    |
|    | 30 | 9.001 4538 | 2121 | 9.004 0229 | 2143  | 1.001 7888 | 9.997 8725 | 21 | 30 |    |
|    | 40 | 9.001 6641 | 2121 | 9.004 2471 | 2143  | 1.001 8395 | 9.997 8725 | 21 | 20 |    |
|    | 50 | 9.001 8744 | 2121 | 9.004 4713 | 2143  | 1.001 8902 | 9.997 8725 | 21 | 10 |    |
| 46 | 0  | 9.002 0847 | 2121 | 9.004 6955 | 2143  | 1.001 9409 | 9.997 8725 | 21 | 0  | 14 |
|    | 10 | 9.002 2950 | 2121 | 9.004 9197 | 2143  | 1.001 9916 | 9.997 8725 | 21 | 50 |    |
|    | 20 | 9.002 5053 | 2121 | 9.005 1439 | 2143  | 1.002 0423 | 9.997 8725 | 21 | 40 |    |
|    | 30 | 9.002 7156 | 2121 | 9.005 3681 | 2143  | 1.002 0930 | 9.997 8725 | 21 | 30 |    |
|    | 40 | 9.002 9259 | 2121 | 9.005 5923 | 2143  | 1.002 1437 | 9.997 8725 | 21 | 20 |    |
|    | 50 | 9.003 1362 | 2121 | 9.005 8165 | 2143  | 1.002 1944 | 9.997 8725 | 21 | 10 |    |
| 47 | 0  | 9.003 3465 | 2121 | 9.006 0407 | 2143  | 1.002 2451 | 9.997 8725 | 21 | 0  | 13 |
|    | 10 | 9.003 5568 | 2121 | 9.006 2649 | 2143  | 1.002 2958 | 9.997 8725 | 21 | 50 |    |
|    | 20 | 9.003 7671 | 2121 | 9.006 4891 | 2143  | 1.002 3465 | 9.997 8725 | 21 | 40 |    |
|    | 30 | 9.003 9774 | 2121 | 9.006 7133 | 2143  | 1.002 3972 | 9.997 8725 | 21 | 30 |    |
|    | 40 | 9.004 1877 | 2121 | 9.006 9375 | 2143  | 1.002 4479 | 9.997 8725 | 21 | 20 |    |
|    | 50 | 9.004 3980 | 2121 | 9.007 1617 | 2143  | 1.002 4986 | 9.997 8725 | 21 | 10 |    |
| 48 | 0  | 9.004 6083 | 2121 | 9.007 3859 | 2143  | 1.002 5493 | 9.997 8725 | 21 | 0  | 12 |
|    | 10 | 9.004 8186 | 2121 | 9.007 6101 | 2143  | 1.002 6000 | 9.997 8725 | 21 | 50 |    |
|    | 20 | 9.005 0289 | 2121 | 9.007 8343 | 2143  | 1.002 6507 | 9.997 8725 | 21 | 40 |    |
|    | 30 | 9.005 2392 | 2121 | 9.008 0585 | 2143  | 1.002 7014 | 9.997 8725 | 21 | 30 |    |
|    | 40 | 9.005 4495 | 2121 | 9.008 2827 | 2143  | 1.002 7521 | 9.997 8725 | 21 | 20 |    |
|    | 50 | 9.005 6598 | 2121 | 9.008 5069 | 2143  | 1.002 8028 | 9.997 8725 | 21 | 10 |    |
| 49 | 0  | 9.005 8701 | 2121 | 9.008 7311 | 2143  | 1.002 8535 | 9.997 8725 | 21 | 0  | 11 |
|    | 10 | 9.006 0804 | 2121 | 9.008 9553 | 2143  | 1.002 9042 | 9.997 8725 | 21 | 50 |    |
|    | 20 | 9.006 2907 | 2121 | 9.009 1795 | 2143  | 1.002 9549 | 9.997 8725 | 21 | 40 |    |
|    | 30 | 9.006 5010 | 2121 | 9.009 4037 | 2143  | 1.003 0056 | 9.997 8725 | 21 | 30 |    |
|    | 40 | 9.006 7113 | 2121 | 9.009 6279 | 2143  | 1.003 0563 | 9.997 8725 | 21 | 20 |    |
|    | 50 | 9.006 9216 | 2121 | 9.009 8521 | 2143  | 1.003 1070 | 9.997 8725 | 21 | 10 |    |
| 50 | 0  | 9.007 1319 | 2121 | 9.010 0763 | 2143  | 1.003 1577 | 9.997 8725 | 21 | 0  | 10 |
|    | 10 | 9.007 3422 | 2121 | 9.010 3005 | 2143  | 1.003 2084 | 9.997 8725 | 21 | 50 |    |
|    | 20 | 9.007 5525 | 2121 | 9.010 5247 | 2143  | 1.003 2591 | 9.997 8725 | 21 | 40 |    |
|    | 30 | 9.007 7628 | 2121 | 9.010 7489 | 2143  | 1.003 3098 | 9.997 8725 | 21 | 30 |    |
|    | 40 | 9.007 9731 | 2121 | 9.010 9731 | 2143  | 1.003 3605 | 9.997 8725 | 21 | 20 |    |
|    | 50 | 9.008 1834 | 2121 | 9.011 1973 | 2143  | 1.003 4112 | 9.997 8725 | 21 | 10 |    |
|    | 0  | 9.008 3937 | 2121 | 9.011 4215 | 2143  | 1.003 4619 | 9.997 8725 | 21 | 0  | 9  |
|    | 10 | 9.008 6040 | 2121 | 9.011 6457 | 2143  | 1.003 5126 | 9.997 8725 | 21 | 50 |    |
|    | 20 | 9.008 8143 | 2121 | 9.011 8699 | 2143  | 1.003 5633 | 9.997 8725 | 21 | 40 |    |
|    | 30 | 9.009 0246 | 2121 | 9.012 0941 | 2143  | 1.003 6140 | 9.997 8725 | 21 | 30 |    |
|    | 40 | 9.009 2349 | 2121 | 9.012 3183 | 2143  | 1.003 6647 | 9.997 8725 | 21 | 20 |    |
|    | 50 | 9.009 4452 | 2121 | 9.012 5425 | 2143  | 1.003 7154 | 9.997 8725 | 21 | 10 |    |
|    | 0  | 9.009 6555 | 2121 | 9.012 7667 | 2143  | 1.003 7661 | 9.997 8725 | 21 | 0  | 8  |
|    | 10 | 9.009 8658 | 2121 | 9.012 9909 | 2143  | 1.003 8168 | 9.997 8725 | 21 | 50 |    |
|    | 20 | 9.010 0761 | 2121 | 9.013 2151 | 2143  | 1.003 8675 | 9.997 8725 | 21 | 40 |    |
|    | 30 | 9.010 2864 | 2121 | 9.013 4393 | 2143  | 1.003 9182 | 9.997 8725 | 21 | 30 |    |
|    | 40 | 9.010 4967 | 2121 | 9.013 6635 | 2143  | 1.003 9689 | 9.997 8725 | 21 | 20 |    |
|    | 50 | 9.010 7070 | 2121 | 9.013 8877 | 2143  | 1.004 0196 | 9.997 8725 | 21 | 10 |    |
|    | 0  | 9.010 9173 | 2121 | 9.014 1119 | 2143  | 1.004 0703 | 9.997 8725 | 21 | 0  | 7  |
|    | 10 | 9.011 1276 | 2121 | 9.014 3361 | 2143  | 1.004 1210 | 9.997 8725 | 21 | 50 |    |
|    | 20 | 9.011 3379 | 2121 | 9.014 5603 | 2143  | 1.004 1717 | 9.997 8725 | 21 | 40 |    |
|    | 30 | 9.011 5482 | 2121 | 9.014 7845 | 2143  | 1.004 2224 | 9.997 8725 | 21 | 30 |    |
|    | 40 | 9.011 7585 | 2121 | 9.015 0087 | 2143  | 1.004 2731 | 9.997 8725 | 21 | 20 |    |
|    | 50 | 9.011 9688 | 2121 | 9.015 2329 | 2143  | 1.004 3238 | 9.997 8725 | 21 | 10 |    |
|    | 0  | 9.012 1791 | 2121 | 9.015 4571 | 2143  | 1.004 3745 | 9.997 8725 | 21 | 0  | 6  |
|    | 10 | 9.012 3894 | 2121 | 9.015 6813 | 2143  | 1.004 4252 | 9.997 8725 | 21 | 50 |    |
|    | 20 | 9.012 6007 | 2121 | 9.015 9055 | 2143  | 1.004 4759 | 9.997 8725 | 21 | 40 |    |
|    | 30 | 9.012 8110 | 2121 | 9.016 1297 | 2143  | 1.004 5266 | 9.997 8725 | 21 | 30 |    |
|    | 40 | 9.013 0213 | 2121 | 9.016 3539 | 2143  | 1.004 5773 | 9.997 8725 | 21 | 20 |    |
|    | 50 | 9.013 2316 | 2121 | 9.016 5781 | 2143  | 1.004 6280 | 9.997 8725 | 21 | 10 |    |
|    | 0  | 9.013 4419 | 2121 | 9.016 8023 | 2143  | 1.004 6787 | 9.997 8725 | 21 | 0  | 5  |
|    | 10 | 9.013 6522 | 2121 | 9.017 0265 | 2143  | 1.004 7294 | 9.997 8725 | 21 | 50 |    |
|    | 20 | 9.013 8625 | 2121 | 9.017 2507 | 2143  | 1.004 7801 | 9.997 8725 | 21 | 40 |    |
|    | 30 | 9.014 0728 | 2121 | 9.017 4749 | 2143  | 1.004 8308 | 9.997 8725 | 21 | 30 |    |
|    | 40 | 9.014 2831 | 2121 | 9.017 6991 | 2143  | 1.004 8815 | 9.997 8725 | 21 | 20 |    |
|    | 50 | 9.014 4934 | 2121 | 9.017 9233 | 2143  | 1.004 9322 | 9.997 8725 | 21 | 10 |    |
|    | 0  | 9.014 7037 | 2121 | 9.018 1475 | 2143  | 1.004 9829 | 9.997 8725 | 21 | 0  | 4  |
|    | 10 | 9.014 9140 | 2121 | 9.018 3717 | 2143  | 1.005 0336 | 9.997 8725 | 21 | 50 |    |
|    | 20 | 9.015 1243 | 2121 | 9.018 5959 | 2143  | 1.005 0843 | 9.997 8725 | 21 | 40 |    |
|    | 30 | 9.015 3346 | 2121 | 9.018 8201 | 2143  | 1.005 1350 | 9.997 8725 | 21 | 30 |    |
|    | 40 | 9.015 5449 | 2121 | 9.019 0443 | 2143  | 1.005 1857 | 9.997 8725 | 21 | 20 |    |
|    | 50 | 9.015 7552 | 2121 | 9.019 2685 | 2143  | 1.005 2364 | 9.997 8725 | 21 | 10 |    |
|    | 0  | 9.015 9655 | 2121 | 9.019 4927 | 2143  | 1.005 2871 | 9.997 8725 | 21 | 0  | 3  |
|    | 10 | 9.016 1758 | 2121 | 9.019 7169 | 2143  | 1.005 3378 | 9.997 8725 | 21 | 50 |    |
|    | 20 | 9.016 3861 | 2121 | 9.019 9411 | 2143  | 1.005 3885 | 9.997 8725 | 21 | 40 |    |
|    | 30 | 9.016 5964 | 2121 | 9.020 1653 | 2143  | 1.005 4392 | 9.997 8725 | 21 | 30 |    |
|    | 40 | 9.016 8067 | 2121 | 9.020 3895 | 2143  | 1.005 4899 | 9.997 8725 | 21 | 20 |    |
|    | 50 | 9.017 0170 | 2121 | 9.020 6137 | 2143  | 1.005 5406 | 9.997 8725 | 21 | 10 |    |
|    | 0  | 9.017 2273 | 2121 | 9.020 8379 | 2143  | 1.005 5913 | 9.997 8725 | 21 | 0  | 2  |
|    | 10 | 9.017 4376 | 2121 | 9.021 0621 | 2143  | 1.005 6420 | 9.997 8725 | 21 | 50 |    |
|    | 20 | 9.017 6479 | 2121 | 9.021 2863 | 2143  |            |            |    |    |    |



|    | "  | Sin        | d.   | Tang        | d. c. | Cotg       | Cos        | d. | "  |    |
|----|----|------------|------|-------------|-------|------------|------------|----|----|----|
| 50 | 0  | 9.007 0436 | 2061 | 9.009 29 84 | 2081  | 0.990 7016 | 9.997 7453 | 22 | 0  | 10 |
|    | 10 | 9.007 2497 | 2059 | 9.009 50 65 | 2081  | 0.990 4935 | 9.997 7431 | 21 | 50 |    |
|    | 20 | 9.007 4556 | 2059 | 9.009 71 46 | 2080  | 0.990 2854 | 9.997 7410 | 22 | 40 |    |
|    | 30 | 9.007 6615 | 2057 | 9.009 92 26 | 2079  | 0.990 0774 | 9.997 7388 | 21 | 30 |    |
|    | 40 | 9.007 8672 | 2057 | 9.010 13 05 | 2078  | 0.989 8695 | 9.997 7367 | 22 | 20 |    |
|    | 50 | 9.008 0729 | 2055 | 9.010 33 83 | 2078  | 0.989 6617 | 9.997 7345 | 22 | 10 |    |
| 51 | 0  | 9.008 2784 | 2055 | 9.010 54 61 | 2076  | 0.989 4539 | 9.997 7323 | 21 | 0  | 9  |
|    | 10 | 9.008 4839 | 2053 | 9.010 75 37 | 2075  | 0.989 2463 | 9.997 7302 | 22 | 50 |    |
|    | 20 | 9.008 6892 | 2053 | 9.010 96 12 | 2074  | 0.989 0388 | 9.997 7280 | 21 | 40 |    |
|    | 30 | 9.008 8945 | 2051 | 9.011 16 86 | 2073  | 0.988 8314 | 9.997 7259 | 22 | 30 |    |
|    | 40 | 9.009 0996 | 2051 | 9.011 37 59 | 2072  | 0.988 6241 | 9.997 7237 | 22 | 20 |    |
|    | 50 | 9.009 3047 | 2049 | 9.011 58 31 | 2072  | 0.988 4169 | 9.997 7215 | 21 | 10 |    |
| 52 | 0  | 9.009 5096 | 2049 | 9.011 79 03 | 2070  | 0.988 2097 | 9.997 7194 | 22 | 0  | 8  |
|    | 10 | 9.009 7145 | 2048 | 9.011 99 73 | 2069  | 0.988 0027 | 9.997 7172 | 21 | 50 |    |
|    | 20 | 9.009 9193 | 2046 | 9.012 20 42 | 2068  | 0.987 7958 | 9.997 7151 | 22 | 40 |    |
|    | 30 | 9.010 1239 | 2046 | 9.012 41 10 | 2068  | 0.987 5890 | 9.997 7129 | 22 | 30 |    |
|    | 40 | 9.010 3285 | 2045 | 9.012 61 78 | 2066  | 0.987 3822 | 9.997 7107 | 21 | 20 |    |
|    | 50 | 9.010 5330 | 2044 | 9.012 82 44 | 2066  | 0.987 1756 | 9.997 7086 | 22 | 10 |    |
| 53 | 0  | 9.010 7374 | 2042 | 9.013 03 10 | 2064  | 0.986 9690 | 9.997 7064 | 22 | 0  | 7  |
|    | 10 | 9.010 9416 | 2042 | 9.013 23 74 | 2064  | 0.986 7626 | 9.997 7042 | 22 | 50 |    |
|    | 20 | 9.011 1458 | 2041 | 9.013 44 38 | 2062  | 0.986 5562 | 9.997 7020 | 21 | 40 |    |
|    | 30 | 9.011 3499 | 2040 | 9.013 65 00 | 2062  | 0.986 3500 | 9.997 6999 | 22 | 30 |    |
|    | 40 | 9.011 5539 | 2039 | 9.013 85 62 | 2061  | 0.986 1438 | 9.997 6977 | 22 | 20 |    |
|    | 50 | 9.011 7578 | 2038 | 9.014 06 23 | 2059  | 0.985 9377 | 9.997 6955 | 22 | 10 |    |
| 54 | 0  | 9.011 9616 | 2037 | 9.014 26 82 | 2059  | 0.985 7318 | 9.997 6933 | 21 | 0  | 6  |
|    | 10 | 9.012 1653 | 2036 | 9.014 47 41 | 2058  | 0.985 5259 | 9.997 6912 | 22 | 50 |    |
|    | 20 | 9.012 3689 | 2035 | 9.014 67 99 | 2057  | 0.985 3201 | 9.997 6890 | 22 | 40 |    |
|    | 30 | 9.012 5724 | 2034 | 9.014 88 56 | 2056  | 0.985 1144 | 9.997 6868 | 22 | 30 |    |
|    | 40 | 9.012 7758 | 2033 | 9.015 09 12 | 2055  | 0.984 9088 | 9.997 6846 | 21 | 20 |    |
|    | 50 | 9.012 9791 | 2032 | 9.015 29 67 | 2054  | 0.984 7033 | 9.997 6825 | 22 | 10 |    |
| 55 | 0  | 9.013 1823 | 2032 | 9.015 50 21 | 2053  | 0.984 4979 | 9.997 6803 | 22 | 0  | 5  |
|    | 10 | 9.013 3855 | 2030 | 9.015 70 74 | 2052  | 0.984 2926 | 9.997 6781 | 22 | 50 |    |
|    | 20 | 9.013 5885 | 2029 | 9.015 91 26 | 2051  | 0.984 0874 | 9.997 6759 | 22 | 40 |    |
|    | 30 | 9.013 7914 | 2028 | 9.016 11 77 | 2050  | 0.983 8823 | 9.997 6737 | 22 | 30 |    |
|    | 40 | 9.013 9942 | 2028 | 9.016 32 27 | 2049  | 0.983 6773 | 9.997 6715 | 21 | 20 |    |
|    | 50 | 9.014 1970 | 2026 | 9.016 52 76 | 2049  | 0.983 4724 | 9.997 6694 | 22 | 10 |    |
| 56 | 0  | 9.014 3996 | 2026 | 9.016 73 25 | 2047  | 0.983 2675 | 9.997 6672 | 22 | 0  | 4  |
|    | 10 | 9.014 6022 | 2024 | 9.016 93 72 | 2046  | 0.983 0628 | 9.997 6650 | 22 | 50 |    |
|    | 20 | 9.014 8046 | 2024 | 9.017 14 18 | 2046  | 0.982 8582 | 9.997 6628 | 22 | 40 |    |
|    | 30 | 9.015 0070 | 2022 | 9.017 34 64 | 2044  | 0.982 6536 | 9.997 6606 | 22 | 30 |    |
|    | 40 | 9.015 2092 | 2022 | 9.017 55 08 | 2044  | 0.982 4492 | 9.997 6584 | 22 | 20 |    |
|    | 50 | 9.015 4114 | 2021 | 9.017 75 52 | 2042  | 0.982 2448 | 9.997 6562 | 22 | 10 |    |
| 57 | 0  | 9.015 6135 | 2019 | 9.017 95 94 | 2042  | 0.982 0406 | 9.997 6540 | 22 | 0  | 3  |
|    | 10 | 9.015 8154 | 2019 | 9.018 16 36 | 2041  | 0.981 8364 | 9.997 6518 | 22 | 50 |    |
|    | 20 | 9.016 0173 | 2018 | 9.018 36 77 | 2040  | 0.981 6323 | 9.997 6496 | 22 | 40 |    |
|    | 30 | 9.016 2191 | 2017 | 9.018 57 17 | 2039  | 0.981 4283 | 9.997 6474 | 22 | 30 |    |
|    | 40 | 9.016 4208 | 2016 | 9.018 77 56 | 2038  | 0.981 2244 | 9.997 6452 | 22 | 20 |    |
|    | 50 | 9.016 6224 | 2015 | 9.018 97 94 | 2037  | 0.981 0206 | 9.997 6430 | 22 | 10 |    |
| 58 | 0  | 9.016 8239 | 2014 | 9.019 18 31 | 2036  | 0.980 8169 | 9.997 6408 | 22 | 0  | 2  |
|    | 10 | 9.017 0253 | 2013 | 9.019 38 67 | 2035  | 0.980 6133 | 9.997 6386 | 22 | 50 |    |
|    | 20 | 9.017 2266 | 2012 | 9.019 59 02 | 2034  | 0.980 4098 | 9.997 6364 | 22 | 40 |    |
|    | 30 | 9.017 4278 | 2012 | 9.019 79 36 | 2033  | 0.980 2064 | 9.997 6342 | 22 | 30 |    |
|    | 40 | 9.017 6290 | 2010 | 9.019 99 69 | 2033  | 0.980 0031 | 9.997 6320 | 22 | 20 |    |
|    | 50 | 9.017 8300 | 2009 | 9.020 20 02 | 2031  | 0.979 7998 | 9.997 6298 | 22 | 10 |    |
| 59 | 0  | 9.018 0309 | 2009 | 9.020 40 33 | 2031  | 0.979 5967 | 9.997 6276 | 22 | 0  | 1  |
|    | 10 | 9.018 2318 | 2007 | 9.020 60 64 | 2029  | 0.979 3936 | 9.997 6254 | 22 | 50 |    |
|    | 20 | 9.018 4325 | 2007 | 9.020 80 93 | 2029  | 0.979 1907 | 9.997 6232 | 22 | 40 |    |
|    | 30 | 9.018 6332 | 2005 | 9.021 01 22 | 2028  | 0.978 9878 | 9.997 6210 | 22 | 30 |    |
|    | 40 | 9.018 8337 | 2005 | 9.021 21 50 | 2026  | 0.978 7850 | 9.997 6188 | 22 | 20 |    |
|    | 50 | 9.019 0342 | 2004 | 9.021 41 76 | 2026  | 0.978 5824 | 9.997 6166 | 22 | 10 |    |
| 60 | 0  | 9.019 2346 |      | 9.021 62 02 |       | 0.978 3798 | 9.997 6143 | 23 | 0  | 0  |
|    | "  | Cos        | d.   | Cotg        | d. c. | Tang       | Sin        | d. | "  |    |

2070

207

414

621

828

1035

1242

1449

1656

1863

2070

206

412

618

824

1030

1236

1443

1649

1854

2060

205

410

615

820

1025

1230

1435

1640

1845

2040

204

408

612

816

1020

1224

1428

1632

1836

2030

203

406

609

812

1015

1218

1421

1624

1827

2020

202

404

606

808

1010

1212

1414

1616

1818

2010

201

402

603

804

1005

1206

1407

1608

1809

2000

200

400

600

800

1000

1200

1400

1600

1800



| 2020  | i  | u  | Bin        | d.   | Tang       | d. c. | Colg       | Con        | d. | u  | i  |
|-------|----|----|------------|------|------------|-------|------------|------------|----|----|----|
| 1 301 | 0  | 0  | 9.019 2346 | 1932 | 9.021 6132 | 1935  | 9.023 2708 | 9.027 6143 | 32 | 0  | 60 |
| 2 304 | 10 | 10 | 9.019 3148 | 1934 | 9.021 8227 | 1937  | 9.023 1721 | 9.027 6131 | 31 | 50 |    |
| 3 308 | 20 | 20 | 9.019 6150 | 1931 | 9.022 2354 | 1934  | 9.027 7130 | 9.027 6109 | 28 | 40 |    |
| 4 310 | 30 | 30 | 9.019 8154 | 1931 | 9.022 2354 | 1934  | 9.027 7130 | 9.027 6137 | 28 | 30 |    |
| 5 313 | 40 | 40 | 9.020 0151 | 1939 | 9.022 4296 | 1932  | 9.027 5134 | 9.027 6135 | 28 | 20 |    |
| 6 314 | 50 | 50 | 9.020 2350 | 1939 | 9.022 6148 | 1932  | 9.027 1004 | 9.027 6141 | 21 | 10 |    |
| 7 316 | 1  | 0  | 9.020 4348 | 1938 | 9.022 8148 | 1939  | 9.027 6065 | 9.027 6141 | 21 | 0  | 59 |
| 8 318 | 10 | 10 | 9.020 6346 | 1936 | 9.023 0157 | 1939  | 9.027 6061 | 9.027 6088 | 21 | 50 |    |
| 9 321 | 20 | 20 | 9.020 8343 | 1935 | 9.023 2176 | 1937  | 9.027 6064 | 9.027 6066 | 21 | 40 |    |
| 1 323 | 30 | 30 | 9.021 0337 | 1935 | 9.023 4191 | 1937  | 9.027 6067 | 9.027 6062 | 21 | 30 |    |
| 2 324 | 40 | 40 | 9.021 2332 | 1934 | 9.023 6190 | 1937  | 9.027 6100 | 9.027 6054 | 21 | 20 |    |
| 3 325 | 50 | 50 | 9.021 4325 | 1934 | 9.023 8136 | 1936  | 9.027 6133 | 9.027 6092 | 21 | 10 |    |
| 4 327 | 2  | 0  | 9.021 6318 | 1932 | 9.024 0144 | 1934  | 9.027 6055 | 9.027 6077 | 21 | 0  | 58 |
| 5 328 | 10 | 10 | 9.021 8310 | 1930 | 9.024 2155 | 1934  | 9.027 6055 | 9.027 6079 | 21 | 50 |    |
| 6 330 | 20 | 20 | 9.022 0303 | 1930 | 9.024 4165 | 1934  | 9.027 6054 | 9.027 6081 | 21 | 40 |    |
| 7 331 | 30 | 30 | 9.022 2297 | 1930 | 9.024 6160 | 1934  | 9.027 6050 | 9.027 6084 | 21 | 30 |    |
| 8 332 | 40 | 40 | 9.022 4292 | 1938 | 9.024 8191 | 1930  | 9.027 6050 | 9.027 6086 | 21 | 20 |    |
| 9 333 | 50 | 50 | 9.022 6287 | 1937 | 9.025 0191 | 1930  | 9.027 6050 | 9.027 6086 | 21 | 10 |    |
| 1 334 | 3  | 0  | 9.022 8284 | 1936 | 9.025 2190 | 1930  | 9.027 6050 | 9.027 6084 | 21 | 0  | 57 |
| 2 335 | 10 | 10 | 9.023 0281 | 1935 | 9.025 4199 | 1930  | 9.027 6050 | 9.027 6084 | 21 | 50 |    |
| 3 336 | 20 | 20 | 9.023 2275 | 1935 | 9.025 6206 | 1930  | 9.027 6050 | 9.027 6084 | 21 | 40 |    |
| 4 337 | 30 | 30 | 9.023 4270 | 1935 | 9.025 8211 | 1930  | 9.027 6050 | 9.027 6084 | 21 | 30 |    |
| 5 338 | 40 | 40 | 9.023 6265 | 1934 | 9.026 0217 | 1930  | 9.027 6050 | 9.027 6084 | 21 | 20 |    |
| 6 339 | 50 | 50 | 9.023 8261 | 1934 | 9.026 2224 | 1930  | 9.027 6050 | 9.027 6084 | 21 | 10 |    |
| 7 340 | 4  | 0  | 9.024 0257 | 1931 | 9.026 4231 | 1930  | 9.027 6050 | 9.027 6084 | 21 | 0  | 56 |
| 8 341 | 10 | 10 | 9.024 2158 | 1929 | 9.026 6237 | 1930  | 9.027 6050 | 9.027 6084 | 21 | 50 |    |
| 9 342 | 20 | 20 | 9.024 4157 | 1929 | 9.026 8243 | 1930  | 9.027 6050 | 9.027 6084 | 21 | 40 |    |
| 1 343 | 30 | 30 | 9.024 6096 | 1928 | 9.027 0254 | 1930  | 9.027 6050 | 9.027 6084 | 21 | 30 |    |
| 2 344 | 40 | 40 | 9.024 8074 | 1927 | 9.027 2254 | 1930  | 9.027 6050 | 9.027 6084 | 21 | 20 |    |
| 3 345 | 50 | 50 | 9.025 0051 | 1926 | 9.027 4254 | 1929  | 9.027 6050 | 9.027 6084 | 21 | 10 |    |
| 4 346 | 5  | 0  | 9.025 2032 | 1925 | 9.027 6254 | 1929  | 9.027 6050 | 9.027 6084 | 21 | 0  | 55 |
| 5 347 | 10 | 10 | 9.025 4015 | 1925 | 9.027 8254 | 1929  | 9.027 6050 | 9.027 6084 | 21 | 50 |    |
| 6 348 | 20 | 20 | 9.025 6000 | 1925 | 9.028 0254 | 1929  | 9.027 6050 | 9.027 6084 | 21 | 40 |    |
| 7 349 | 30 | 30 | 9.025 8000 | 1924 | 9.028 2254 | 1929  | 9.027 6050 | 9.027 6084 | 21 | 30 |    |
| 8 350 | 40 | 40 | 9.026 0000 | 1924 | 9.028 4254 | 1929  | 9.027 6050 | 9.027 6084 | 21 | 20 |    |
| 9 351 | 50 | 50 | 9.026 2000 | 1924 | 9.028 6254 | 1929  | 9.027 6050 | 9.027 6084 | 21 | 10 |    |
| 1 352 | 6  | 0  | 9.026 4000 | 1923 | 9.028 8254 | 1929  | 9.027 6050 | 9.027 6084 | 21 | 0  | 54 |
| 2 353 | 10 | 10 | 9.026 6000 | 1923 | 9.029 0254 | 1929  | 9.027 6050 | 9.027 6084 | 21 | 50 |    |
| 3 354 | 20 | 20 | 9.026 8000 | 1923 | 9.029 2254 | 1929  | 9.027 6050 | 9.027 6084 | 21 | 40 |    |
| 4 355 | 30 | 30 | 9.027 0000 | 1923 | 9.029 4254 | 1929  | 9.027 6050 | 9.027 6084 | 21 | 30 |    |
| 5 356 | 40 | 40 | 9.027 2000 | 1923 | 9.029 6254 | 1929  | 9.027 6050 | 9.027 6084 | 21 | 20 |    |
| 6 357 | 50 | 50 | 9.027 4000 | 1923 | 9.029 8254 | 1929  | 9.027 6050 | 9.027 6084 | 21 | 10 |    |
| 7 358 | 7  | 0  | 9.027 6000 | 1923 | 9.030 0254 | 1929  | 9.027 6050 | 9.027 6084 | 21 | 0  | 53 |
| 8 359 | 10 | 10 | 9.027 8000 | 1923 | 9.030 2254 | 1929  | 9.027 6050 | 9.027 6084 | 21 | 50 |    |
| 9 360 | 20 | 20 | 9.028 0000 | 1923 | 9.030 4254 | 1929  | 9.027 6050 | 9.027 6084 | 21 | 40 |    |
| 1 361 | 30 | 30 | 9.028 2000 | 1923 | 9.030 6254 | 1929  | 9.027 6050 | 9.027 6084 | 21 | 30 |    |
| 2 362 | 40 | 40 | 9.028 4000 | 1923 | 9.030 8254 | 1929  | 9.027 6050 | 9.027 6084 | 21 | 20 |    |
| 3 363 | 50 | 50 | 9.028 6000 | 1923 | 9.031 0254 | 1929  | 9.027 6050 | 9.027 6084 | 21 | 10 |    |
| 4 364 | 8  | 0  | 9.028 8000 | 1923 | 9.031 2254 | 1929  | 9.027 6050 | 9.027 6084 | 21 | 0  | 52 |
| 5 365 | 10 | 10 | 9.029 0000 | 1923 | 9.031 4254 | 1929  | 9.027 6050 | 9.027 6084 | 21 | 50 |    |
| 6 366 | 20 | 20 | 9.029 2000 | 1923 | 9.031 6254 | 1929  | 9.027 6050 | 9.027 6084 | 21 | 40 |    |
| 7 367 | 30 | 30 | 9.029 4000 | 1923 | 9.031 8254 | 1929  | 9.027 6050 | 9.027 6084 | 21 | 30 |    |
| 8 368 | 40 | 40 | 9.029 6000 | 1923 | 9.032 0254 | 1929  | 9.027 6050 | 9.027 6084 | 21 | 20 |    |
| 9 369 | 50 | 50 | 9.029 8000 | 1923 | 9.032 2254 | 1929  | 9.027 6050 | 9.027 6084 | 21 | 10 |    |
| 1 370 | 9  | 0  | 9.029 9999 | 1924 | 9.032 4254 | 1929  | 9.027 6050 | 9.027 6084 | 21 | 0  | 51 |
| 2 371 | 10 | 10 | 9.030 1111 | 1924 | 9.032 6254 | 1929  | 9.027 6050 | 9.027 6084 | 21 | 50 |    |
| 3 372 | 20 | 20 | 9.030 3333 | 1924 | 9.032 8254 | 1929  | 9.027 6050 | 9.027 6084 | 21 | 40 |    |
| 4 373 | 30 | 30 | 9.030 5555 | 1924 | 9.033 0254 | 1929  | 9.027 6050 | 9.027 6084 | 21 | 30 |    |
| 5 374 | 40 | 40 | 9.030 7777 | 1924 | 9.033 2254 | 1929  | 9.027 6050 | 9.027 6084 | 21 | 20 |    |
| 6 375 | 50 | 50 | 9.030 9999 | 1924 | 9.033 4254 | 1929  | 9.027 6050 | 9.027 6084 | 21 | 10 |    |
| 7 376 | 10 | 0  | 9.031 0000 | 1924 | 9.033 6254 | 1929  | 9.027 6050 | 9.027 6084 | 21 | 0  | 50 |
| 8 377 | 20 | 20 | 9.031 2222 | 1924 | 9.033 8254 | 1929  | 9.027 6050 | 9.027 6084 | 21 | 50 |    |
| 9 378 | 30 | 30 | 9.031 4444 | 1924 | 9.034 0254 | 1929  | 9.027 6050 | 9.027 6084 | 21 | 40 |    |
| 1 379 | 40 | 40 | 9.031 6666 | 1924 | 9.034 2254 | 1929  | 9.027 6050 | 9.027 6084 | 21 | 30 |    |
| 2 380 | 50 | 50 | 9.031 8888 | 1924 | 9.034 4254 | 1929  | 9.027 6050 | 9.027 6084 | 21 | 20 |    |
| 3 381 | 6  | 0  | 9.032 0000 | 1924 | 9.034 6254 | 1929  | 9.027 6050 | 9.027 6084 | 21 | 0  | 49 |
| 4 382 | 10 | 10 | 9.032 2222 | 1924 | 9.034 8254 | 1929  | 9.027 6050 | 9.027 6084 | 21 | 50 |    |
| 5 383 | 20 | 20 | 9.032 4444 | 1924 | 9.035 0254 | 1929  | 9.027 6050 | 9.027 6084 | 21 | 40 |    |
| 6 384 | 30 | 30 | 9.032 6666 | 1924 | 9.035 2254 | 1929  | 9.027 6050 | 9.027 6084 | 21 | 30 |    |
| 7 385 | 40 | 40 | 9.032 8888 | 1924 | 9.035 4254 | 1929  | 9.027 6050 | 9.027 6084 | 21 | 20 |    |
| 8 386 | 50 | 50 | 9.033 0000 | 1924 | 9.035 6254 | 1929  | 9.027 6050 | 9.027 6084 | 21 | 10 |    |
| 9 387 | 7  | 0  | 9.033 2222 | 1924 | 9.035 8254 | 1929  | 9.027 6050 | 9.027 6084 | 21 | 0  | 48 |
| 1 388 | 10 | 10 | 9.033 4444 | 1924 | 9.036 0254 | 1929  | 9.027 6050 | 9.027 6084 | 21 | 50 |    |
| 2 389 | 20 | 20 | 9.033 6666 | 1924 | 9.036 2254 | 1929  | 9.027 6050 | 9.027 6084 | 21 | 40 |    |
| 3 390 | 30 | 30 | 9.033 8888 | 1924 | 9.036 4254 | 1929  | 9.027 6050 | 9.027 6084 | 21 | 30 |    |
| 4 391 | 40 | 40 | 9.034 0000 | 1924 | 9.036 6254 | 1929  | 9.027 6050 | 9.027 6084 | 21 | 20 |    |
| 5 392 | 50 | 50 | 9.034 2222 | 1924 | 9.036 8254 | 1929  | 9.027 6050 | 9.027 6084 | 21 | 10 |    |
| 6 393 | 8  | 0  | 9.034 4444 | 1924 | 9.037 0254 | 1929  | 9.027 6050 | 9.027 6084 | 21 | 0  | 47 |
| 7 394 | 10 | 10 | 9.034 6666 | 1924 | 9.037 2254 | 1929  | 9.027 6050 | 9.027 6084 | 21 | 50 |    |
| 8 395 | 20 | 20 | 9.034 8888 | 1924 | 9.037 4254 | 1929  | 9.027 6050 | 9.027 6084 | 21 | 40 |    |
| 9 396 | 30 | 30 | 9.035 0000 | 1924 | 9.037 6254 | 1929  | 9.027 6050 | 9.027 6084 | 21 | 30 |    |
| 1 397 | 40 | 40 | 9.035 2222 | 1924 | 9.037 8254 | 1929  | 9.027 6050 | 9.027 6084 | 21 | 20 |    |
| 2 398 | 50 | 50 | 9.035 4444 | 1924 | 9.038 0254 | 1929  | 9.027 6050 | 9.027 6084 | 21 | 10 |    |
| 3 399 | 9  | 0  | 9.035 6666 | 1924 | 9.038 2254 | 1929  | 9.027 6050 | 9.027 6084 | 21 | 0  | 46 |
| 4 400 | 10 | 10 | 9.035 8888 | 1924 | 9.038 4254 | 1929  | 9.027 6050 | 9.027 6084 | 21 | 50 |    |
| 5 401 | 20 | 20 | 9.036 0000 | 1924 | 9.038 6254 | 1929  | 9.027 6050 | 9.027 6084 | 21 | 40 |    |
| 6 402 | 30 | 30 | 9.036 2222 | 1924 | 9.038 8254 | 1929  | 9.027 6050 | 9.027 6084 | 21 | 30 |    |
| 7 403 | 40 | 40 | 9.036 4444 | 1924 | 9.039 0254 | 1929  | 9.027 6050 | 9.027 6084 | 21 | 20 |    |
| 8 404 | 50 | 50 | 9.036 6666 | 1924 | 9.039 2254 | 1929  | 9.027 6050 | 9.027 6084 | 21 | 10 |    |
| 9 405 | 10 | 0  | 9.036 8888 | 1924 | 9.039 4254 | 1929  | 9.027 6050 | 9.027 6084 | 21 | 0  | 45 |
| 1 406 | 20 | 20 | 9.037 0000 | 1924 | 9.039 6254 | 1929  | 9.027 6050 | 9.027 6084 | 21 | 50 |    |
| 2 407 | 30 | 30 | 9.037 2222 | 1924 | 9.039 8254 | 1929  | 9.027 6050 | 9.027 6084 | 21 | 40 |    |
| 3 408 | 40 | 40 | 9.037 4444 | 1924 | 9.040 0254 | 1929  | 9.027 6050 | 9.027 6084 | 21 | 30 |    |
| 4 409 | 50 | 50 | 9.037 6666 | 1924 | 9.040 2254 | 1929  | 9.027 6050 | 9.027 6084 | 21 | 20 |    |
| 5 410 | 6  | 0  | 9.037 8888 | 1924 | 9.040 4254 | 1929  | 9.027 6050 | 9.027 6084 | 21 | 0  | 44 |
| 6 411 | 10 | 10 | 9.038 0000 | 1924 | 9.040 6254 | 1929  | 9.027 6050 | 9.027 6084 | 21 | 50 |    |
| 7 412 | 20 | 20 | 9.038 2222 | 1924 | 9.040 8254 | 1929  | 9.027 6050 | 9.027 6084 | 21 | 40 |    |
| 8 413 | 30 | 30 | 9.038 4444 | 1924 | 9.041 0254 | 1929  | 9.027 6050 | 9.027 6084 | 21 | 30 |    |
| 9 414 | 40 | 40 | 9.038 6666 | 1924 | 9.041 2254 | 1929  | 9.027 6050 | 9.027 6084 | 21 | 20 |    |
| 1 415 | 50 | 50 |            |      |            |       |            |            |    |    |    |



| i  | "  | Sin        | d.   | Tang       | d. c. | Cotg       | Coa        | d. | "  | i  |
|----|----|------------|------|------------|-------|------------|------------|----|----|----|
| 10 | o  | 9.031 0890 | 1949 | 9.033 6093 | 1971  | 0.966 3907 | 9.997 4797 | 23 | o  | 50 |
| 10 | 10 | 9.031 2839 | 1947 | 9.033 8064 | 1971  | 0.966 1936 | 9.997 4774 | 22 | 50 |    |
| 20 | 10 | 9.031 4786 | 1947 | 9.034 0035 | 1969  | 0.965 9965 | 9.997 4752 | 23 | 40 |    |
| 30 | 10 | 9.031 6733 | 1945 | 9.034 2004 | 1968  | 0.965 7996 | 9.997 4729 | 23 | 30 |    |
| 40 | 10 | 9.031 8678 | 1945 | 9.034 3972 | 1968  | 0.965 6028 | 9.997 4706 | 23 | 20 |    |
| 50 | 10 | 9.032 0623 | 1944 | 9.034 5940 | 1966  | 0.965 4060 | 9.997 4683 | 23 | 10 |    |
| 11 | o  | 9.032 2567 | 1943 | 9.034 7906 | 1966  | 0.965 2094 | 9.997 4660 | 23 | o  | 49 |
| 10 | 10 | 9.032 4510 | 1942 | 9.034 9872 | 1965  | 0.965 0128 | 9.997 4638 | 23 | 50 |    |
| 20 | 10 | 9.032 6452 | 1941 | 9.035 1837 | 1964  | 0.964 8163 | 9.997 4615 | 23 | 40 |    |
| 30 | 10 | 9.032 8393 | 1941 | 9.035 3801 | 1963  | 0.964 6199 | 9.997 4592 | 23 | 30 |    |
| 40 | 10 | 9.033 0334 | 1939 | 9.035 5764 | 1963  | 0.964 4236 | 9.997 4569 | 23 | 20 |    |
| 50 | 10 | 9.033 2273 | 1939 | 9.035 7727 | 1961  | 0.964 2273 | 9.997 4546 | 23 | 10 |    |
| 12 | o  | 9.033 4212 | 1937 | 9.035 9688 | 1961  | 0.964 0312 | 9.997 4523 | 22 | o  | 48 |
| 10 | 10 | 9.033 6149 | 1937 | 9.036 1649 | 1960  | 0.963 8351 | 9.997 4501 | 23 | 50 |    |
| 20 | 10 | 9.033 8086 | 1936 | 9.036 3609 | 1958  | 0.963 6391 | 9.997 4478 | 23 | 40 |    |
| 30 | 10 | 9.034 0022 | 1935 | 9.036 5567 | 1959  | 0.963 4433 | 9.997 4455 | 23 | 30 |    |
| 40 | 10 | 9.034 1957 | 1935 | 9.036 7526 | 1957  | 0.963 2474 | 9.997 4432 | 23 | 20 |    |
| 50 | 10 | 9.034 3892 | 1933 | 9.036 9483 | 1956  | 0.963 0517 | 9.997 4409 | 23 | 10 |    |
| 13 | o  | 9.034 5825 | 1932 | 9.037 1439 | 1955  | 0.962 8561 | 9.997 4386 | 23 | o  | 47 |
| 10 | 10 | 9.034 7757 | 1932 | 9.037 3394 | 1955  | 0.962 6606 | 9.997 4363 | 23 | 50 |    |
| 20 | 10 | 9.034 9689 | 1931 | 9.037 5349 | 1954  | 0.962 4651 | 9.997 4340 | 23 | 40 |    |
| 30 | 10 | 9.035 1620 | 1930 | 9.037 7303 | 1953  | 0.962 2697 | 9.997 4317 | 23 | 30 |    |
| 40 | 10 | 9.035 3550 | 1929 | 9.037 9256 | 1952  | 0.962 0744 | 9.997 4294 | 23 | 20 |    |
| 50 | 10 | 9.035 5479 | 1928 | 9.038 1208 | 1951  | 0.961 8792 | 9.997 4271 | 23 | 10 |    |
| 14 | o  | 9.035 7407 | 1927 | 9.038 3159 | 1950  | 0.961 6841 | 9.997 4248 | 23 | o  | 46 |
| 10 | 10 | 9.035 9334 | 1927 | 9.038 5109 | 1949  | 0.961 4891 | 9.997 4225 | 23 | 50 |    |
| 20 | 10 | 9.036 1261 | 1925 | 9.038 7058 | 1949  | 0.961 2942 | 9.997 4202 | 23 | 40 |    |
| 30 | 10 | 9.036 3186 | 1925 | 9.038 9007 | 1948  | 0.961 0993 | 9.997 4179 | 23 | 30 |    |
| 40 | 10 | 9.036 5111 | 1924 | 9.039 0955 | 1947  | 0.960 9045 | 9.997 4156 | 23 | 20 |    |
| 50 | 10 | 9.036 7035 | 1923 | 9.039 2902 | 1946  | 0.960 7098 | 9.997 4133 | 23 | 10 |    |
| 15 | o  | 9.036 8958 | 1922 | 9.039 4848 | 1945  | 0.960 5152 | 9.997 4110 | 23 | o  | 45 |
| 10 | 10 | 9.037 0880 | 1921 | 9.039 6793 | 1944  | 0.960 3207 | 9.997 4087 | 23 | 50 |    |
| 20 | 10 | 9.037 2801 | 1920 | 9.039 8737 | 1944  | 0.960 1263 | 9.997 4064 | 23 | 40 |    |
| 30 | 10 | 9.037 4721 | 1920 | 9.040 0681 | 1942  | 0.959 9319 | 9.997 4041 | 23 | 30 |    |
| 40 | 10 | 9.037 6641 | 1920 | 9.040 2623 | 1942  | 0.959 7377 | 9.997 4018 | 23 | 20 |    |
| 50 | 10 | 9.037 8559 | 1918 | 9.040 4565 | 1941  | 0.959 5435 | 9.997 3995 | 23 | 10 |    |
| 16 | o  | 9.038 0477 | 1918 | 9.040 6506 | 1940  | 0.959 3494 | 9.997 3971 | 23 | o  | 44 |
| 10 | 10 | 9.038 2394 | 1916 | 9.040 8446 | 1939  | 0.959 1554 | 9.997 3948 | 23 | 50 |    |
| 20 | 10 | 9.038 4310 | 1916 | 9.041 0385 | 1939  | 0.958 9615 | 9.997 3925 | 23 | 40 |    |
| 30 | 10 | 9.038 6226 | 1914 | 9.041 2324 | 1937  | 0.958 7676 | 9.997 3902 | 23 | 30 |    |
| 40 | 10 | 9.038 8140 | 1914 | 9.041 4261 | 1937  | 0.958 5739 | 9.997 3879 | 23 | 20 |    |
| 50 | 10 | 9.039 0054 | 1912 | 9.041 6198 | 1936  | 0.958 3802 | 9.997 3856 | 23 | 10 |    |
| 17 | o  | 9.039 1966 | 1912 | 9.041 8134 | 1935  | 0.958 1866 | 9.997 3833 | 24 | o  | 43 |
| 10 | 10 | 9.039 3878 | 1911 | 9.042 0069 | 1934  | 0.957 9931 | 9.997 3809 | 23 | 50 |    |
| 20 | 10 | 9.039 5789 | 1910 | 9.042 2003 | 1933  | 0.957 7997 | 9.997 3786 | 23 | 40 |    |
| 30 | 10 | 9.039 7699 | 1909 | 9.042 3936 | 1933  | 0.957 6064 | 9.997 3763 | 23 | 30 |    |
| 40 | 10 | 9.039 9608 | 1909 | 9.042 5869 | 1931  | 0.957 4131 | 9.997 3740 | 23 | 20 |    |
| 50 | 10 | 9.040 1517 | 1907 | 9.042 7800 | 1931  | 0.957 2200 | 9.997 3716 | 23 | 10 |    |
| 18 | o  | 9.040 3424 | 1907 | 9.042 9731 | 1930  | 0.957 0269 | 9.997 3693 | 23 | o  | 42 |
| 10 | 10 | 9.040 5331 | 1906 | 9.043 1661 | 1929  | 0.956 8339 | 9.997 3670 | 23 | 50 |    |
| 20 | 10 | 9.040 7237 | 1905 | 9.043 3590 | 1929  | 0.956 6410 | 9.997 3647 | 23 | 40 |    |
| 30 | 10 | 9.040 9142 | 1904 | 9.043 5519 | 1927  | 0.956 4481 | 9.997 3623 | 23 | 30 |    |
| 40 | 10 | 9.041 1046 | 1904 | 9.043 7446 | 1927  | 0.956 2554 | 9.997 3600 | 23 | 20 |    |
| 50 | 10 | 9.041 2950 | 1902 | 9.043 9373 | 1926  | 0.956 0627 | 9.997 3577 | 23 | 10 |    |
| 19 | o  | 9.041 4852 | 1902 | 9.044 1299 | 1924  | 0.955 8701 | 9.997 3554 | 24 | o  | 41 |
| 10 | 10 | 9.041 6754 | 1901 | 9.044 3223 | 1925  | 0.955 6777 | 9.997 3530 | 23 | 50 |    |
| 20 | 10 | 9.041 8655 | 1900 | 9.044 5148 | 1923  | 0.955 4852 | 9.997 3507 | 23 | 40 |    |
| 30 | 10 | 9.042 0555 | 1899 | 9.044 7071 | 1922  | 0.955 2929 | 9.997 3484 | 24 | 30 |    |
| 40 | 10 | 9.042 2454 | 1898 | 9.044 8993 | 1922  | 0.955 1007 | 9.997 3460 | 23 | 20 |    |
| 50 | 10 | 9.042 4352 | 1897 | 9.045 0915 | 1921  | 0.954 9085 | 9.997 3437 | 23 | 10 |    |
| 20 | o  | 9.042 6249 |      | 9.045 2836 |       | 0.954 7164 | 9.997 3414 | 23 | o  | 40 |
|    |    |            |      |            |       |            |            |    |    |    |
| i  | "  | Coa        | d.   | Cotg       | d. c. | Tang       | Sin        | d. | "  | i  |

1960

1 196  
2 392  
3 588  
4 784  
5 980  
6 1176  
7 1372  
8 1568  
9 1764

1950

1 195  
2 390  
3 585  
4 780  
5 975  
6 1170  
7 1365  
8 1560  
9 1755

1940

1 194  
2 388  
3 582  
4 776  
5 970  
6 1164  
7 1358  
8 1552  
9 1746

1930

1 193  
2 386  
3 579  
4 772  
5 966  
6 1158  
7 1351  
8 1544  
9 1737

1920

1 192  
2 384  
3 576  
4 768  
5 960  
6 1152  
7 1344  
8 1536  
9 1728

1910

1 191  
2 382  
3 573  
4 764  
5 955  
6 1146  
7 1337  
8 1528  
9 1719

1900

1 190  
2 380  
3 570  
4 760  
5 950  
6 1140  
7 1330  
8 1520  
9 1710

1890

1 189  
2 378  
3 567  
4 756  
5 945  
6 1134  
7 1323  
8 1512  
9 1701



|      | i | n  | Sin        | d.   | Tang       | d. c. | Coſg       | Coſ        | d. | n  | i  |
|------|---|----|------------|------|------------|-------|------------|------------|----|----|----|
| 1920 | 1 | 0  | 9.042 6249 | 1897 | 9.045 3846 | 1920  | 0.954 7164 | 9.997 3244 | 24 | 0  | 40 |
| 1    | 1 | 10 | 9.042 8146 | 1896 | 9.045 4756 | 1919  | 0.954 5243 | 9.997 4199 | 24 | 50 |    |
| 2    | 2 | 20 | 9.043 0142 | 1895 | 9.045 6678 | 1918  | 0.954 3343 | 9.997 5167 | 24 | 40 |    |
| 3    | 3 | 30 | 9.043 1947 | 1894 | 9.045 8593 | 1917  | 0.954 1442 | 9.997 6147 | 24 | 30 |    |
| 4    | 4 | 40 | 9.043 3841 | 1893 | 9.046 0511 | 1916  | 0.953 9540 | 9.997 7130 | 24 | 20 |    |
| 5    | 5 | 50 | 9.043 5724 | 1892 | 9.046 2435 | 1915  | 0.953 7637 | 9.997 8127 | 24 | 10 |    |
| 1910 | 6 | 0  | 9.043 7617 | 1891 | 9.046 4354 | 1914  | 0.953 5732 | 9.997 9134 | 24 | 0  | 30 |
| 1    | 1 | 10 | 9.043 9508 | 1890 | 9.046 6258 | 1913  | 0.953 3734 | 9.998 0151 | 24 | 50 |    |
| 2    | 2 | 20 | 9.044 1399 | 1889 | 9.046 8173 | 1912  | 0.953 1732 | 9.998 1176 | 24 | 40 |    |
| 3    | 3 | 30 | 9.044 3289 | 1888 | 9.047 0086 | 1911  | 0.952 9724 | 9.998 2219 | 24 | 30 |    |
| 4    | 4 | 40 | 9.044 5178 | 1887 | 9.047 1999 | 1910  | 0.952 7711 | 9.998 3279 | 24 | 20 |    |
| 5    | 5 | 50 | 9.044 7066 | 1886 | 9.047 3910 | 1911  | 0.952 5691 | 9.998 4356 | 24 | 10 |    |
| 1900 | 6 | 0  | 9.044 8954 | 1886 | 9.047 5821 | 1910  | 0.952 3664 | 9.998 5449 | 24 | 0  | 38 |
| 1    | 1 | 10 | 9.045 0840 | 1886 | 9.047 7724 | 1910  | 0.952 1639 | 9.998 6559 | 24 | 50 |    |
| 2    | 2 | 20 | 9.045 2726 | 1885 | 9.047 9631 | 1909  | 0.951 9614 | 9.998 7684 | 24 | 40 |    |
| 3    | 3 | 30 | 9.045 4611 | 1884 | 9.048 1537 | 1908  | 0.951 7584 | 9.998 8824 | 24 | 30 |    |
| 4    | 4 | 40 | 9.045 6495 | 1884 | 9.048 3442 | 1907  | 0.951 5549 | 9.999 0000 | 24 | 20 |    |
| 5    | 5 | 50 | 9.045 8378 | 1884 | 9.048 5346 | 1906  | 0.951 3514 | 9.999 1194 | 24 | 10 |    |
| 1900 | 6 | 0  | 9.046 0261 | 1882 | 9.048 7249 | 1905  | 0.951 1474 | 9.999 2404 | 24 | 0  | 37 |
| 1    | 1 | 10 | 9.046 2143 | 1885 | 9.048 9152 | 1904  | 0.950 9424 | 9.999 3629 | 24 | 50 |    |
| 2    | 2 | 20 | 9.046 4023 | 1886 | 9.049 1059 | 1903  | 0.950 7364 | 9.999 4869 | 24 | 40 |    |
| 3    | 3 | 30 | 9.046 5901 | 1886 | 9.049 2964 | 1902  | 0.950 5294 | 9.999 6124 | 24 | 30 |    |
| 4    | 4 | 40 | 9.046 7778 | 1886 | 9.049 4866 | 1901  | 0.950 3214 | 9.999 7394 | 24 | 20 |    |
| 5    | 5 | 50 | 9.046 9661 | 1887 | 9.049 6768 | 1901  | 0.950 1124 | 9.999 8679 | 24 | 10 |    |
| 1890 | 6 | 0  | 9.047 1538 | 1887 | 9.049 8669 | 1901  | 0.949 9024 | 9.999 9979 | 24 | 0  | 36 |
| 1    | 1 | 10 | 9.047 3415 | 1886 | 9.049 0569 | 1900  | 0.949 6914 | 9.999 1284 | 24 | 50 |    |
| 2    | 2 | 20 | 9.047 5291 | 1885 | 9.049 2464 | 1900  | 0.949 4794 | 9.999 2599 | 24 | 40 |    |
| 3    | 3 | 30 | 9.047 7166 | 1885 | 9.049 4354 | 1900  | 0.949 2664 | 9.999 3924 | 24 | 30 |    |
| 4    | 4 | 40 | 9.047 9049 | 1884 | 9.049 6245 | 1899  | 0.949 0524 | 9.999 5264 | 24 | 20 |    |
| 5    | 5 | 50 | 9.048 0924 | 1884 | 9.049 8124 | 1899  | 0.948 8374 | 9.999 6619 | 24 | 10 |    |
| 1890 | 6 | 0  | 9.048 2798 | 1882 | 9.049 9998 | 1898  | 0.948 6214 | 9.999 7984 | 24 | 0  | 35 |
| 1    | 1 | 10 | 9.048 4668 | 1882 | 9.050 1871 | 1898  | 0.948 4044 | 9.999 9364 | 24 | 50 |    |
| 2    | 2 | 20 | 9.048 6529 | 1882 | 9.050 3749 | 1897  | 0.948 1864 | 9.999 0759 | 24 | 40 |    |
| 3    | 3 | 30 | 9.048 8399 | 1882 | 9.050 5624 | 1896  | 0.947 9674 | 9.999 2174 | 24 | 30 |    |
| 4    | 4 | 40 | 9.049 0269 | 1881 | 9.050 7504 | 1895  | 0.947 7474 | 9.999 3604 | 24 | 20 |    |
| 5    | 5 | 50 | 9.049 2147 | 1880 | 9.050 9384 | 1894  | 0.947 5264 | 9.999 5049 | 24 | 10 |    |
| 1880 | 6 | 0  | 9.049 4033 | 1880 | 9.051 1264 | 1894  | 0.947 3044 | 9.999 6504 | 24 | 0  | 34 |
| 1    | 1 | 10 | 9.049 5892 | 1880 | 9.051 3144 | 1893  | 0.947 0814 | 9.999 7969 | 24 | 50 |    |
| 2    | 2 | 20 | 9.049 7738 | 1880 | 9.051 5024 | 1892  | 0.946 8574 | 9.999 9439 | 24 | 40 |    |
| 3    | 3 | 30 | 9.049 9603 | 1880 | 9.051 6904 | 1891  | 0.946 6324 | 9.999 0914 | 24 | 30 |    |
| 4    | 4 | 40 | 9.050 1468 | 1880 | 9.051 8784 | 1890  | 0.946 4064 | 9.999 2394 | 24 | 20 |    |
| 5    | 5 | 50 | 9.050 3331 | 1880 | 9.052 0664 | 1889  | 0.946 1794 | 9.999 3879 | 24 | 10 |    |
| 1880 | 6 | 0  | 9.050 5194 | 1880 | 9.052 2544 | 1888  | 0.945 9514 | 9.999 5364 | 24 | 0  | 33 |
| 1    | 1 | 10 | 9.050 7050 | 1881 | 9.052 4424 | 1887  | 0.945 7224 | 9.999 6859 | 24 | 50 |    |
| 2    | 2 | 20 | 9.050 8919 | 1881 | 9.052 6304 | 1886  | 0.945 4924 | 9.999 8359 | 24 | 40 |    |
| 3    | 3 | 30 | 9.051 0778 | 1880 | 9.052 8184 | 1885  | 0.945 2614 | 9.999 9864 | 24 | 30 |    |
| 4    | 4 | 40 | 9.051 2637 | 1880 | 9.053 0064 | 1884  | 0.945 0294 | 9.999 1374 | 24 | 20 |    |
| 5    | 5 | 50 | 9.051 4496 | 1880 | 9.053 1944 | 1883  | 0.944 7964 | 9.999 2889 | 24 | 10 |    |
| 1880 | 6 | 0  | 9.051 6354 | 1882 | 9.053 3824 | 1884  | 0.944 5624 | 9.999 4404 | 24 | 0  | 32 |
| 1    | 1 | 10 | 9.051 8211 | 1882 | 9.053 5704 | 1883  | 0.944 3274 | 9.999 5924 | 24 | 50 |    |
| 2    | 2 | 20 | 9.052 0068 | 1885 | 9.053 7584 | 1882  | 0.944 0914 | 9.999 7449 | 24 | 40 |    |
| 3    | 3 | 30 | 9.052 1923 | 1885 | 9.053 9464 | 1881  | 0.943 8544 | 9.999 8974 | 24 | 30 |    |
| 4    | 4 | 40 | 9.052 3778 | 1884 | 9.054 1344 | 1880  | 0.943 6164 | 9.999 0504 | 24 | 20 |    |
| 5    | 5 | 50 | 9.052 5631 | 1883 | 9.054 3224 | 1879  | 0.943 3774 | 9.999 2039 | 24 | 10 |    |
| 1880 | 6 | 0  | 9.052 7485 | 1883 | 9.054 5104 | 1878  | 0.943 1374 | 9.999 3574 | 24 | 0  | 31 |
| 1    | 1 | 10 | 9.052 9338 | 1881 | 9.054 6984 | 1877  | 0.942 8964 | 9.999 5114 | 24 | 50 |    |
| 2    | 2 | 20 | 9.053 1189 | 1881 | 9.054 8864 | 1876  | 0.942 6544 | 9.999 6659 | 24 | 40 |    |
| 3    | 3 | 30 | 9.053 3049 | 1880 | 9.055 0744 | 1875  | 0.942 4114 | 9.999 8204 | 24 | 30 |    |
| 4    | 4 | 40 | 9.053 4899 | 1879 | 9.055 2624 | 1874  | 0.942 1674 | 9.999 9749 | 24 | 20 |    |
| 5    | 5 | 50 | 9.053 6749 | 1879 | 9.055 4504 | 1873  | 0.941 9224 | 9.999 1294 | 24 | 10 |    |
| 1880 | 6 | 0  | 9.053 8588 | 1879 | 9.055 6384 | 1872  | 0.941 6764 | 9.999 2839 | 24 | 0  | 30 |
| 1    | 1 |    |            |      |            |       |            |            |    |    |    |
|      | i | n  | Coſ        | d.   | Coſg       | d. c. | Tang       | ſin        | d. | n  | i  |



|    | "  | Sin        | d.   | Tang       | d. c. | Cotg       | Cos        | d. | "  |    |
|----|----|------------|------|------------|-------|------------|------------|----|----|----|
| 30 | o  | 9.053 8588 | 1847 | 9.056 6595 | 1871  | 0.943 3405 | 9.997 1993 | 24 | o  | 30 |
|    | 10 | 9.054 0435 | 1847 | 9.056 8466 | 1871  | 0.943 1534 | 9.997 1969 | 24 | 50 |    |
|    | 20 | 9.054 2282 | 1846 | 9.057 0337 | 1870  | 0.942 9663 | 9.997 1945 | 24 | 40 |    |
|    | 30 | 9.054 4128 | 1845 | 9.057 2207 | 1869  | 0.942 7793 | 9.997 1921 | 24 | 30 |    |
|    | 40 | 9.054 5973 | 1845 | 9.057 4076 | 1869  | 0.942 5924 | 9.997 1897 | 24 | 20 |    |
|    | 50 | 9.054 7818 | 1843 | 9.057 5945 | 1868  | 0.942 4055 | 9.997 1873 | 24 | 10 |    |
| 31 | o  | 9.054 9661 | 1843 | 9.057 7813 | 1866  | 0.942 2187 | 9.997 1849 | 24 | o  | 29 |
|    | 10 | 9.055 1504 | 1842 | 9.057 9679 | 1866  | 0.942 0321 | 9.997 1825 | 24 | 50 |    |
|    | 20 | 9.055 3346 | 1841 | 9.058 1545 | 1866  | 0.941 8455 | 9.997 1801 | 25 | 40 |    |
|    | 30 | 9.055 5187 | 1841 | 9.058 3411 | 1864  | 0.941 6589 | 9.997 1776 | 24 | 30 |    |
|    | 40 | 9.055 7028 | 1839 | 9.058 5275 | 1864  | 0.941 4725 | 9.997 1752 | 24 | 20 |    |
|    | 50 | 9.055 8867 | 1839 | 9.058 7139 | 1863  | 0.941 2861 | 9.997 1728 | 24 | 10 |    |
| 32 | o  | 9.056 0706 | 1838 | 9.058 9002 | 1862  | 0.941 0998 | 9.997 1704 | 24 | o  | 28 |
|    | 10 | 9.056 2544 | 1838 | 9.059 0864 | 1862  | 0.940 9136 | 9.997 1680 | 24 | 50 |    |
|    | 20 | 9.056 4382 | 1836 | 9.059 2726 | 1860  | 0.940 7274 | 9.997 1656 | 24 | 40 |    |
|    | 30 | 9.056 6218 | 1836 | 9.059 4586 | 1860  | 0.940 5414 | 9.997 1632 | 24 | 30 |    |
|    | 40 | 9.056 8054 | 1835 | 9.059 6446 | 1859  | 0.940 3554 | 9.997 1608 | 25 | 20 |    |
|    | 50 | 9.056 9889 | 1834 | 9.059 8305 | 1859  | 0.940 1695 | 9.997 1583 | 24 | 10 |    |
| 33 | o  | 9.057 1723 | 1833 | 9.060 0164 | 1857  | 0.939 9836 | 9.997 1559 | 24 | o  | 27 |
|    | 10 | 9.057 3556 | 1833 | 9.060 2021 | 1857  | 0.939 7979 | 9.997 1535 | 24 | 50 |    |
|    | 20 | 9.057 5389 | 1832 | 9.060 3878 | 1856  | 0.939 6122 | 9.997 1511 | 24 | 40 |    |
|    | 30 | 9.057 7221 | 1831 | 9.060 5734 | 1855  | 0.939 4266 | 9.997 1487 | 24 | 30 |    |
|    | 40 | 9.057 9052 | 1830 | 9.060 7589 | 1855  | 0.939 2411 | 9.997 1463 | 25 | 20 |    |
|    | 50 | 9.058 0882 | 1829 | 9.060 9444 | 1853  | 0.939 0556 | 9.997 1438 | 24 | 10 |    |
| 34 | o  | 9.058 2711 | 1829 | 9.061 1297 | 1853  | 0.938 8703 | 9.997 1414 | 24 | o  | 26 |
|    | 10 | 9.058 4540 | 1828 | 9.061 3150 | 1852  | 0.938 6850 | 9.997 1390 | 24 | 50 |    |
|    | 20 | 9.058 6368 | 1827 | 9.061 5002 | 1852  | 0.938 4998 | 9.997 1366 | 25 | 40 |    |
|    | 30 | 9.058 8195 | 1827 | 9.061 6854 | 1850  | 0.938 3146 | 9.997 1341 | 24 | 30 |    |
|    | 40 | 9.059 0022 | 1825 | 9.061 8704 | 1850  | 0.938 1296 | 9.997 1317 | 24 | 20 |    |
|    | 50 | 9.059 1847 | 1825 | 9.062 0554 | 1849  | 0.937 9446 | 9.997 1293 | 25 | 10 |    |
| 35 | o  | 9.059 3672 | 1824 | 9.062 2403 | 1849  | 0.937 7597 | 9.997 1268 | 24 | o  | 25 |
|    | 10 | 9.059 5496 | 1823 | 9.062 4252 | 1847  | 0.937 5748 | 9.997 1244 | 24 | 50 |    |
|    | 20 | 9.059 7319 | 1823 | 9.062 6099 | 1847  | 0.937 3901 | 9.997 1220 | 24 | 40 |    |
|    | 30 | 9.059 9142 | 1821 | 9.062 7946 | 1846  | 0.937 2054 | 9.997 1196 | 25 | 30 |    |
|    | 40 | 9.060 0963 | 1821 | 9.062 9792 | 1845  | 0.937 0208 | 9.997 1171 | 24 | 20 |    |
|    | 50 | 9.060 2784 | 1820 | 9.063 1637 | 1845  | 0.936 8363 | 9.997 1147 | 25 | 10 |    |
| 36 | o  | 9.060 4604 | 1820 | 9.063 3482 | 1843  | 0.936 6518 | 9.997 1122 | 24 | o  | 24 |
|    | 10 | 9.060 6424 | 1818 | 9.063 5325 | 1843  | 0.936 4675 | 9.997 1098 | 24 | 50 |    |
|    | 20 | 9.060 8242 | 1818 | 9.063 7168 | 1843  | 0.936 2832 | 9.997 1074 | 25 | 40 |    |
|    | 30 | 9.061 0060 | 1817 | 9.063 9011 | 1841  | 0.936 0989 | 9.997 1049 | 24 | 30 |    |
|    | 40 | 9.061 1877 | 1816 | 9.064 0852 | 1841  | 0.935 9148 | 9.997 1025 | 24 | 20 |    |
|    | 50 | 9.061 3693 | 1816 | 9.064 2693 | 1840  | 0.935 7307 | 9.997 1001 | 25 | 10 |    |
| 37 | o  | 9.061 5509 | 1815 | 9.064 4533 | 1839  | 0.935 5467 | 9.997 0976 | 24 | o  | 23 |
|    | 10 | 9.061 7324 | 1814 | 9.064 6372 | 1838  | 0.935 3628 | 9.997 0952 | 25 | 50 |    |
|    | 20 | 9.061 9138 | 1813 | 9.064 8210 | 1838  | 0.935 1790 | 9.997 0927 | 24 | 40 |    |
|    | 30 | 9.062 0951 | 1812 | 9.065 0048 | 1837  | 0.934 9952 | 9.997 0903 | 25 | 30 |    |
|    | 40 | 9.062 2763 | 1812 | 9.065 1885 | 1836  | 0.934 8115 | 9.997 0878 | 24 | 20 |    |
|    | 50 | 9.062 4575 | 1811 | 9.065 3721 | 1835  | 0.934 6279 | 9.997 0854 | 25 | 10 |    |
| 38 | o  | 9.062 6386 | 1810 | 9.065 5556 | 1835  | 0.934 4444 | 9.997 0829 | 24 | o  | 22 |
|    | 10 | 9.062 8196 | 1809 | 9.065 7391 | 1834  | 0.934 2609 | 9.997 0805 | 25 | 50 |    |
|    | 20 | 9.063 0005 | 1809 | 9.065 9225 | 1833  | 0.934 0775 | 9.997 0780 | 24 | 40 |    |
|    | 30 | 9.063 1814 | 1808 | 9.066 1058 | 1832  | 0.933 8942 | 9.997 0756 | 25 | 30 |    |
|    | 40 | 9.063 3622 | 1807 | 9.066 2890 | 1832  | 0.933 7110 | 9.997 0731 | 24 | 20 |    |
|    | 50 | 9.063 5429 | 1806 | 9.066 4722 | 1831  | 0.933 5278 | 9.997 0707 | 25 | 10 |    |
| 39 | o  | 9.063 7235 | 1806 | 9.066 6553 | 1830  | 0.933 3447 | 9.997 0682 | 24 | o  | 21 |
|    | 10 | 9.063 9041 | 1805 | 9.066 8383 | 1829  | 0.933 1617 | 9.997 0658 | 25 | 50 |    |
|    | 20 | 9.064 0846 | 1804 | 9.067 0212 | 1829  | 0.932 9788 | 9.997 0633 | 24 | 40 |    |
|    | 30 | 9.064 2650 | 1803 | 9.067 2041 | 1828  | 0.932 7959 | 9.997 0609 | 25 | 30 |    |
|    | 40 | 9.064 4453 | 1802 | 9.067 3869 | 1827  | 0.932 6131 | 9.997 0584 | 24 | 20 |    |
|    | 50 | 9.064 6255 | 1802 | 9.067 5696 | 1826  | 0.932 4304 | 9.997 0559 | 25 | 10 |    |
| 40 | o  | 9.064 8057 |      | 9.067 7522 |       | 0.932 2478 | 9.997 0535 | 24 | o  | 20 |
|    |    |            |      |            |       |            |            |    |    |    |
|    | "  | Cos        | d.   | Cotg       | d. c. | Tang       | Sin        | d. | "  |    |

1870

1 187  
2 374  
3 561  
4 748  
5 935  
6 1122  
7 1309  
8 1496  
9 1683

1860

1 186  
2 371  
3 558  
4 744  
5 930  
6 1116  
7 1302  
8 1488  
9 1674

1850

1 185  
2 370  
3 555  
4 740  
5 925  
6 1110  
7 1295  
8 1480  
9 1665

1840

1 184  
2 368  
3 552  
4 736  
5 915  
6 1104  
7 1288  
8 1472  
9 1656

1830

1 183  
2 366  
3 549  
4 731  
5 915  
6 1098  
7 1281  
8 1464  
9 1647

1820

1 182  
2 364  
3 546  
4 728  
5 910  
6 1091  
7 1274  
8 1456  
9 1638

1810

1 181  
2 362  
3 543  
4 724  
5 905  
6 1086  
7 1267  
8 1448  
9 1629

1800

1 180  
2 360  
3 540  
4 720  
5 900  
6 1080  
7 1260  
8 1440  
9 1610



1880

1 181  
2 182  
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1890

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1 201  
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1800

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1760

1 251  
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3 253  
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6 256  
7 257  
8 258  
9 259

|    |    | Sum       | d.    | Tang      | d. c. | Cotg       | Cos        | d. |    |    |
|----|----|-----------|-------|-----------|-------|------------|------------|----|----|----|
| 40 | 0  | 9.64 8057 | 18 11 | 9.62 7533 | 18 16 | 9.913 3278 | 9.913 3278 | 35 | 0  | 20 |
|    | 10 | 9.64 9868 | 18 11 | 9.62 9348 | 18 15 | 9.913 3278 | 9.913 3278 | 34 | 50 |    |
|    | 20 | 9.65 1688 | 18 11 | 9.63 1171 | 18 14 | 9.913 3278 | 9.913 3278 | 33 | 40 |    |
|    | 30 | 9.65 3498 | 18 11 | 9.63 2997 | 18 13 | 9.913 3278 | 9.913 3278 | 32 | 30 |    |
|    | 40 | 9.65 5307 | 18 11 | 9.63 4820 | 18 12 | 9.913 3278 | 9.913 3278 | 31 | 20 |    |
|    | 50 | 9.65 7115 | 18 11 | 9.63 6641 | 18 11 | 9.913 3278 | 9.913 3278 | 30 | 10 |    |
| 41 | 0  | 9.65 8922 | 18 11 | 9.63 8465 | 18 11 | 9.913 3278 | 9.913 3278 | 29 | 0  | 19 |
|    | 10 | 9.66 0728 | 18 11 | 9.63 0270 | 18 10 | 9.913 3278 | 9.913 3278 | 28 | 50 |    |
|    | 20 | 9.66 2534 | 18 11 | 9.63 2076 | 18 10 | 9.913 3278 | 9.913 3278 | 27 | 40 |    |
|    | 30 | 9.66 4339 | 18 11 | 9.63 3881 | 18 09 | 9.913 3278 | 9.913 3278 | 26 | 30 |    |
|    | 40 | 9.66 6144 | 18 11 | 9.63 5685 | 18 09 | 9.913 3278 | 9.913 3278 | 25 | 20 |    |
|    | 50 | 9.66 7947 | 18 11 | 9.63 7488 | 18 08 | 9.913 3278 | 9.913 3278 | 24 | 10 |    |
| 42 | 0  | 9.66 9749 | 18 11 | 9.63 9289 | 18 08 | 9.913 3278 | 9.913 3278 | 23 | 0  | 18 |
|    | 10 | 9.67 1551 | 18 11 | 9.64 1092 | 18 07 | 9.913 3278 | 9.913 3278 | 22 | 50 |    |
|    | 20 | 9.67 3352 | 18 11 | 9.64 2894 | 18 07 | 9.913 3278 | 9.913 3278 | 21 | 40 |    |
|    | 30 | 9.67 5153 | 18 11 | 9.64 4695 | 18 06 | 9.913 3278 | 9.913 3278 | 20 | 30 |    |
|    | 40 | 9.67 6954 | 18 11 | 9.64 6496 | 18 06 | 9.913 3278 | 9.913 3278 | 19 | 20 |    |
|    | 50 | 9.67 8755 | 18 11 | 9.64 8297 | 18 05 | 9.913 3278 | 9.913 3278 | 18 | 10 |    |
| 43 | 0  | 9.68 0556 | 18 11 | 9.65 0097 | 18 05 | 9.913 3278 | 9.913 3278 | 17 | 0  | 17 |
|    | 10 | 9.68 2357 | 18 11 | 9.65 1898 | 18 04 | 9.913 3278 | 9.913 3278 | 16 | 50 |    |
|    | 20 | 9.68 4158 | 18 11 | 9.65 3699 | 18 04 | 9.913 3278 | 9.913 3278 | 15 | 40 |    |
|    | 30 | 9.68 5959 | 18 11 | 9.65 5499 | 18 03 | 9.913 3278 | 9.913 3278 | 14 | 30 |    |
|    | 40 | 9.68 7760 | 18 11 | 9.65 7300 | 18 03 | 9.913 3278 | 9.913 3278 | 13 | 20 |    |
|    | 50 | 9.68 9561 | 18 11 | 9.65 9101 | 18 02 | 9.913 3278 | 9.913 3278 | 12 | 10 |    |
| 44 | 0  | 9.69 1362 | 18 11 | 9.66 0902 | 18 02 | 9.913 3278 | 9.913 3278 | 11 | 0  | 16 |
|    | 10 | 9.69 3163 | 18 11 | 9.66 2703 | 18 01 | 9.913 3278 | 9.913 3278 | 10 | 50 |    |
|    | 20 | 9.69 4964 | 18 11 | 9.66 4504 | 18 01 | 9.913 3278 | 9.913 3278 | 9  | 40 |    |
|    | 30 | 9.69 6765 | 18 11 | 9.66 6305 | 18 00 | 9.913 3278 | 9.913 3278 | 8  | 30 |    |
|    | 40 | 9.69 8566 | 18 11 | 9.66 8106 | 18 00 | 9.913 3278 | 9.913 3278 | 7  | 20 |    |
|    | 50 | 9.69 0367 | 18 11 | 9.66 9907 | 18 00 | 9.913 3278 | 9.913 3278 | 6  | 10 |    |
| 45 | 0  | 9.69 2168 | 18 11 | 9.67 1708 | 18 00 | 9.913 3278 | 9.913 3278 | 5  | 0  | 15 |
|    | 10 | 9.69 3969 | 18 11 | 9.67 3509 | 17 59 | 9.913 3278 | 9.913 3278 | 4  | 50 |    |
|    | 20 | 9.69 5770 | 18 11 | 9.67 5310 | 17 59 | 9.913 3278 | 9.913 3278 | 3  | 40 |    |
|    | 30 | 9.69 7571 | 18 11 | 9.67 7111 | 17 58 | 9.913 3278 | 9.913 3278 | 2  | 30 |    |
|    | 40 | 9.69 9372 | 18 11 | 9.67 8912 | 17 58 | 9.913 3278 | 9.913 3278 | 1  | 20 |    |
|    | 50 | 9.70 1173 | 18 11 | 9.68 0713 | 17 57 | 9.913 3278 | 9.913 3278 | 0  | 10 |    |
| 46 | 0  | 9.70 2974 | 18 11 | 9.68 2514 | 17 57 | 9.913 3278 | 9.913 3278 | 0  | 0  | 14 |
|    | 10 | 9.70 4775 | 18 11 | 9.68 4315 | 17 56 | 9.913 3278 | 9.913 3278 | 0  | 50 |    |
|    | 20 | 9.70 6576 | 18 11 | 9.68 6116 | 17 56 | 9.913 3278 | 9.913 3278 | 0  | 40 |    |
|    | 30 | 9.70 8377 | 18 11 | 9.68 7917 | 17 55 | 9.913 3278 | 9.913 3278 | 0  | 30 |    |
|    | 40 | 9.71 0178 | 18 11 | 9.68 9718 | 17 55 | 9.913 3278 | 9.913 3278 | 0  | 20 |    |
|    | 50 | 9.71 1979 | 18 11 | 9.69 1519 | 17 54 | 9.913 3278 | 9.913 3278 | 0  | 10 |    |
| 47 | 0  | 9.71 3780 | 18 11 | 9.69 3320 | 17 54 | 9.913 3278 | 9.913 3278 | 0  | 0  | 13 |
|    | 10 | 9.71 5581 | 18 11 | 9.69 5121 | 17 53 | 9.913 3278 | 9.913 3278 | 0  | 50 |    |
|    | 20 | 9.71 7382 | 18 11 | 9.69 6922 | 17 53 | 9.913 3278 | 9.913 3278 | 0  | 40 |    |
|    | 30 | 9.71 9183 | 18 11 | 9.69 8723 | 17 52 | 9.913 3278 | 9.913 3278 | 0  | 30 |    |
|    | 40 | 9.72 0984 | 18 11 | 9.69 0524 | 17 52 | 9.913 3278 | 9.913 3278 | 0  | 20 |    |
|    | 50 | 9.72 2785 | 18 11 | 9.69 2325 | 17 51 | 9.913 3278 | 9.913 3278 | 0  | 10 |    |
| 48 | 0  | 9.72 4586 | 18 11 | 9.69 4126 | 17 51 | 9.913 3278 | 9.913 3278 | 0  | 0  | 12 |
|    | 10 | 9.72 6387 | 18 11 | 9.69 5927 | 17 50 | 9.913 3278 | 9.913 3278 | 0  | 50 |    |
|    | 20 | 9.72 8188 | 18 11 | 9.69 7728 | 17 50 | 9.913 3278 | 9.913 3278 | 0  | 40 |    |
|    | 30 | 9.72 9989 | 18 11 | 9.69 9529 | 17 49 | 9.913 3278 | 9.913 3278 | 0  | 30 |    |
|    | 40 | 9.73 1790 | 18 11 | 9.70 1330 | 17 49 | 9.913 3278 | 9.913 3278 | 0  | 20 |    |
|    | 50 | 9.73 3591 | 18 11 | 9.70 3131 | 17 48 | 9.913 3278 | 9.913 3278 | 0  | 10 |    |
| 49 | 0  | 9.73 5392 | 18 11 | 9.70 4932 | 17 48 | 9.913 3278 | 9.913 3278 | 0  | 0  | 11 |
|    | 10 | 9.73 7193 | 18 11 | 9.70 6733 | 17 47 | 9.913 3278 | 9.913 3278 | 0  | 50 |    |
|    | 20 | 9.73 8994 | 18 11 | 9.70 8534 | 17 47 | 9.913 3278 | 9.913 3278 | 0  | 40 |    |
|    | 30 | 9.74 0795 | 18 11 | 9.71 0335 | 17 46 | 9.913 3278 | 9.913 3278 | 0  | 30 |    |
|    | 40 | 9.74 2596 | 18 11 | 9.71 2136 | 17 46 | 9.913 3278 | 9.913 3278 | 0  | 20 |    |
|    | 50 | 9.74 4397 | 18 11 | 9.71 3937 | 17 45 | 9.913 3278 | 9.913 3278 | 0  | 10 |    |
| 50 | 0  | 9.74 6198 | 18 11 | 9.71 5738 | 17 45 | 9.913 3278 | 9.913 3278 | 0  | 0  | 10 |
|    | 10 | 9.74 7999 | 18 11 | 9.71 7539 | 17 44 | 9.913 3278 | 9.913 3278 | 0  | 50 |    |
|    | 20 | 9.74 9799 | 18 11 | 9.71 9340 | 17 44 | 9.913 3278 | 9.913 3278 | 0  | 40 |    |
|    | 30 | 9.75 1600 | 18 11 | 9.72 1141 | 17 43 | 9.913 3278 | 9.913 3278 | 0  | 30 |    |
|    | 40 | 9.75 3401 | 18 11 | 9.72 2942 | 17 43 | 9.913 3278 | 9.913 3278 | 0  | 20 |    |
|    | 50 | 9.75 5202 | 18 11 | 9.72 4743 | 17 42 | 9.913 3278 | 9.913 3278 | 0  | 10 |    |



|    |    | Sin        | d.   | Tang       | d. c. | Cotg       | Cos        | d. |    |    |       |
|----|----|------------|------|------------|-------|------------|------------|----|----|----|-------|
| 50 | 0  | 9.075 4799 | 1757 | 9.078 5760 | 1782  | 0.921 4240 | 9.996 9040 | 26 | 0  | 10 | 1780  |
|    | 10 | 9.075 6556 | 1756 | 9.078 7542 | 1781  | 0.921 2458 | 9.996 9014 | 25 | 50 |    | 178   |
|    | 20 | 9.075 8312 | 1755 | 9.078 9323 | 1780  | 0.921 0677 | 9.996 8989 | 25 | 40 |    | 356   |
|    | 30 | 9.076 0067 | 1755 | 9.079 1103 | 1780  | 0.920 8897 | 9.996 8964 | 25 | 30 |    | 534   |
|    | 40 | 9.076 1822 | 1753 | 9.079 2883 | 1779  | 0.920 7117 | 9.996 8939 | 26 | 20 |    | 712   |
|    | 50 | 9.076 3575 | 1754 | 9.079 4662 | 1779  | 0.920 5338 | 9.996 8913 | 25 | 10 |    | 890   |
| 51 | 0  | 9.076 5329 | 1752 | 9.079 6441 | 1777  | 0.920 3559 | 9.996 8888 | 25 | 0  | 9  | 1068  |
|    | 10 | 9.076 7081 | 1752 | 9.079 8218 | 1777  | 0.920 1782 | 9.996 8863 | 26 | 50 |    | 1246  |
|    | 20 | 9.076 8833 | 1752 | 9.079 9995 | 1776  | 0.920 0005 | 9.996 8837 | 25 | 40 |    | 1424  |
|    | 30 | 9.077 0584 | 1750 | 9.080 1771 | 1776  | 0.919 8229 | 9.996 8812 | 25 | 30 |    | 1602  |
|    | 40 | 9.077 2334 | 1749 | 9.080 3547 | 1775  | 0.919 6453 | 9.996 8787 | 26 | 20 |    | 1770  |
|    | 50 | 9.077 4083 | 1749 | 9.080 5322 | 1774  | 0.919 4678 | 9.996 8761 | 25 | 10 |    | 1948  |
| 52 | 0  | 9.077 5832 | 1748 | 9.080 7096 | 1773  | 0.919 2904 | 9.996 8736 | 25 | 0  | 8  | 2126  |
|    | 10 | 9.077 7580 | 1747 | 9.080 8869 | 1773  | 0.919 1131 | 9.996 8711 | 26 | 50 |    | 2304  |
|    | 20 | 9.077 9327 | 1747 | 9.081 0642 | 1772  | 0.918 9358 | 9.996 8685 | 25 | 40 |    | 2482  |
|    | 30 | 9.078 1074 | 1746 | 9.081 2414 | 1771  | 0.918 7586 | 9.996 8660 | 25 | 30 |    | 2660  |
|    | 40 | 9.078 2820 | 1745 | 9.081 4185 | 1771  | 0.918 5815 | 9.996 8635 | 26 | 20 |    | 2838  |
|    | 50 | 9.078 4565 | 1745 | 9.081 5956 | 1770  | 0.918 4044 | 9.996 8609 | 25 | 10 |    | 3016  |
| 53 | 0  | 9.078 6310 | 1744 | 9.081 7726 | 1769  | 0.918 2274 | 9.996 8584 | 26 | 0  | 7  | 3194  |
|    | 10 | 9.078 8054 | 1743 | 9.081 9495 | 1769  | 0.918 0505 | 9.996 8558 | 25 | 50 |    | 3372  |
|    | 20 | 9.078 9797 | 1742 | 9.082 1264 | 1768  | 0.917 8736 | 9.996 8533 | 26 | 40 |    | 3550  |
|    | 30 | 9.079 1539 | 1742 | 9.082 3032 | 1767  | 0.917 6968 | 9.996 8507 | 25 | 30 |    | 3728  |
|    | 40 | 9.079 3281 | 1741 | 9.082 4799 | 1766  | 0.917 5201 | 9.996 8482 | 25 | 20 |    | 3906  |
|    | 50 | 9.079 5022 | 1740 | 9.082 6565 | 1766  | 0.917 3435 | 9.996 8457 | 26 | 10 |    | 4084  |
| 54 | 0  | 9.079 6762 | 1740 | 9.082 8331 | 1765  | 0.917 1669 | 9.996 8431 | 25 | 0  | 6  | 4262  |
|    | 10 | 9.079 8502 | 1738 | 9.083 0096 | 1764  | 0.916 9904 | 9.996 8406 | 26 | 50 |    | 4440  |
|    | 20 | 9.080 0240 | 1739 | 9.083 1860 | 1764  | 0.916 8140 | 9.996 8380 | 25 | 40 |    | 4618  |
|    | 30 | 9.080 1979 | 1737 | 9.083 3624 | 1763  | 0.916 6376 | 9.996 8355 | 26 | 30 |    | 4796  |
|    | 40 | 9.080 3716 | 1737 | 9.083 5387 | 1762  | 0.916 4613 | 9.996 8329 | 25 | 20 |    | 4974  |
|    | 50 | 9.080 5453 | 1736 | 9.083 7149 | 1762  | 0.916 2851 | 9.996 8304 | 26 | 10 |    | 5152  |
| 55 | 0  | 9.080 7189 | 1735 | 9.083 8911 | 1761  | 0.916 1089 | 9.996 8278 | 26 | 0  | 5  | 5330  |
|    | 10 | 9.080 8924 | 1735 | 9.084 0672 | 1760  | 0.915 9328 | 9.996 8252 | 25 | 50 |    | 5508  |
|    | 20 | 9.081 0659 | 1734 | 9.084 2432 | 1759  | 0.915 7568 | 9.996 8227 | 26 | 40 |    | 5686  |
|    | 30 | 9.081 2393 | 1733 | 9.084 4191 | 1759  | 0.915 5809 | 9.996 8201 | 25 | 30 |    | 5864  |
|    | 40 | 9.081 4126 | 1732 | 9.084 5950 | 1758  | 0.915 4050 | 9.996 8176 | 26 | 20 |    | 6042  |
|    | 50 | 9.081 5858 | 1732 | 9.084 7708 | 1758  | 0.915 2292 | 9.996 8150 | 25 | 10 |    | 6220  |
| 56 | 0  | 9.081 7590 | 1731 | 9.084 9466 | 1756  | 0.915 0534 | 9.996 8125 | 26 | 0  | 4  | 6398  |
|    | 10 | 9.081 9321 | 1731 | 9.085 1222 | 1756  | 0.914 8778 | 9.996 8099 | 26 | 50 |    | 6576  |
|    | 20 | 9.082 1052 | 1729 | 9.085 2978 | 1756  | 0.914 7022 | 9.996 8073 | 25 | 40 |    | 6754  |
|    | 30 | 9.082 2781 | 1729 | 9.085 4734 | 1754  | 0.914 5266 | 9.996 8048 | 26 | 30 |    | 6932  |
|    | 40 | 9.082 4510 | 1729 | 9.085 6488 | 1754  | 0.914 3512 | 9.996 8022 | 26 | 20 |    | 7110  |
|    | 50 | 9.082 6239 | 1727 | 9.085 8242 | 1754  | 0.914 1758 | 9.996 7996 | 25 | 10 |    | 7288  |
| 57 | 0  | 9.082 7966 | 1727 | 9.085 9996 | 1752  | 0.914 0004 | 9.996 7971 | 26 | 0  | 3  | 7466  |
|    | 10 | 9.082 9693 | 1726 | 9.086 1748 | 1752  | 0.913 8252 | 9.996 7945 | 26 | 50 |    | 7644  |
|    | 20 | 9.083 1419 | 1726 | 9.086 3500 | 1751  | 0.913 6500 | 9.996 7919 | 25 | 40 |    | 7822  |
|    | 30 | 9.083 3145 | 1725 | 9.086 5251 | 1751  | 0.913 4749 | 9.996 7894 | 26 | 30 |    | 8000  |
|    | 40 | 9.083 4870 | 1724 | 9.086 7002 | 1750  | 0.913 2998 | 9.996 7868 | 26 | 20 |    | 8178  |
|    | 50 | 9.083 6594 | 1723 | 9.086 8752 | 1749  | 0.913 1248 | 9.996 7842 | 25 | 10 |    | 8356  |
| 58 | 0  | 9.083 8317 | 1723 | 9.087 0501 | 1748  | 0.912 9499 | 9.996 7817 | 26 | 0  | 2  | 8534  |
|    | 10 | 9.084 0040 | 1722 | 9.087 2249 | 1748  | 0.912 7751 | 9.996 7791 | 26 | 50 |    | 8712  |
|    | 20 | 9.084 1762 | 1722 | 9.087 3997 | 1747  | 0.912 6003 | 9.996 7765 | 26 | 40 |    | 8890  |
|    | 30 | 9.084 3484 | 1720 | 9.087 5744 | 1747  | 0.912 4256 | 9.996 7739 | 25 | 30 |    | 9068  |
|    | 40 | 9.084 5204 | 1720 | 9.087 7491 | 1745  | 0.912 2509 | 9.996 7714 | 26 | 20 |    | 9246  |
|    | 50 | 9.084 6924 | 1719 | 9.087 9236 | 1745  | 0.912 0764 | 9.996 7688 | 26 | 10 |    | 9424  |
| 59 | 0  | 9.084 8643 | 1719 | 9.088 0981 | 1745  | 0.911 9019 | 9.996 7662 | 26 | 0  | 1  | 9602  |
|    | 10 | 9.085 0362 | 1718 | 9.088 2726 | 1744  | 0.911 7274 | 9.996 7636 | 26 | 50 |    | 9780  |
|    | 20 | 9.085 2080 | 1717 | 9.088 4470 | 1743  | 0.911 5530 | 9.996 7610 | 25 | 40 |    | 9958  |
|    | 30 | 9.085 3797 | 1717 | 9.088 6213 | 1742  | 0.911 3787 | 9.996 7585 | 26 | 30 |    | 10136 |
|    | 40 | 9.085 5514 | 1716 | 9.088 7955 | 1742  | 0.911 2045 | 9.996 7559 | 26 | 20 |    | 10314 |
|    | 50 | 9.085 7230 | 1715 | 9.088 9697 | 1741  | 0.911 0303 | 9.996 7533 | 26 | 10 |    | 10492 |
| 60 | 0  | 9.085 8945 | 1715 | 9.089 1438 | 1741  | 0.910 8562 | 9.996 7507 | 26 | 0  | 0  | 10670 |
|    |    |            |      |            |       |            |            |    |    |    |       |
|    |    | Cos        | d.   | Cotg       | d. c. | Tang       | Sin        | d. |    |    |       |



|      |      |
|------|------|
| 1080 |      |
| 1    | 168  |
| 2    | 146  |
| 3    | 561  |
| 4    | 674  |
| 5    | 847  |
| 6    | 1008 |
| 7    | 1179 |
| 8    | 1344 |
| 9    | 1512 |

| c  | n  | Sim        | d.   | Tang       | d. c. | Cotg       | Con        | d. | n  | c  |
|----|----|------------|------|------------|-------|------------|------------|----|----|----|
| 0  | 0  | 9.085 8045 | 1714 | 9.089 1418 | 1740  | 0.990 8562 | 9.996 7307 | 16 | 0  | 60 |
|    | 10 | 9.086 0659 | 1714 | 9.089 3128 | 1740  | 0.991 0682 | 9.996 7481 | 16 | 50 |    |
|    | 20 | 9.086 2373 | 1714 | 9.089 4948 | 1740  | 0.991 2812 | 9.996 7655 | 16 | 40 |    |
|    | 30 | 9.086 4086 | 1714 | 9.089 6667 | 1740  | 0.991 4941 | 9.996 7829 | 16 | 30 |    |
|    | 40 | 9.086 5798 | 1714 | 9.089 8405 | 1740  | 0.991 7070 | 9.996 8003 | 16 | 20 |    |
|    | 50 | 9.086 7510 | 1714 | 9.089 9914 | 1740  | 0.991 9200 | 9.996 8177 | 16 | 10 |    |
| 1  | 0  | 9.086 9221 | 1711 | 9.090 1809 | 1737  | 0.992 1328 | 9.996 8351 | 16 | 0  | 50 |
|    | 10 | 9.087 0931 | 1709 | 9.090 3606 | 1735  | 0.992 3456 | 9.996 8525 | 16 | 50 |    |
|    | 20 | 9.087 2641 | 1709 | 9.090 5344 | 1735  | 0.992 5584 | 9.996 8699 | 16 | 40 |    |
|    | 30 | 9.087 4350 | 1709 | 9.090 7076 | 1735  | 0.992 7712 | 9.996 8873 | 16 | 30 |    |
|    | 40 | 9.087 6059 | 1707 | 9.090 8810 | 1733  | 0.992 9840 | 9.996 9047 | 16 | 20 |    |
|    | 50 | 9.087 7766 | 1707 | 9.091 0541 | 1733  | 0.993 1968 | 9.996 9221 | 16 | 10 |    |
| 2  | 0  | 9.087 9474 | 1706 | 9.091 2277 | 1731  | 0.993 4096 | 9.996 9395 | 16 | 0  | 68 |
|    | 10 | 9.088 1180 | 1706 | 9.091 4009 | 1731  | 0.993 6224 | 9.996 9569 | 16 | 50 |    |
|    | 20 | 9.088 2885 | 1706 | 9.091 5741 | 1731  | 0.993 8352 | 9.996 9743 | 16 | 40 |    |
|    | 30 | 9.088 4590 | 1704 | 9.091 7472 | 1731  | 0.994 0480 | 9.996 9917 | 16 | 30 |    |
|    | 40 | 9.088 6291 | 1704 | 9.091 9202 | 1731  | 0.994 2608 | 9.997 0091 | 16 | 20 |    |
|    | 50 | 9.088 7998 | 1702 | 9.092 0931 | 1731  | 0.994 4736 | 9.997 0265 | 16 | 10 |    |
| 3  | 0  | 9.088 9705 | 1701 | 9.092 2660 | 1731  | 0.994 6864 | 9.997 0439 | 16 | 0  | 57 |
|    | 10 | 9.089 1401 | 1701 | 9.092 4389 | 1731  | 0.994 8992 | 9.997 0613 | 16 | 50 |    |
|    | 20 | 9.089 3103 | 1701 | 9.092 6116 | 1731  | 0.995 1120 | 9.997 0787 | 16 | 40 |    |
|    | 30 | 9.089 4805 | 1700 | 9.092 7841 | 1731  | 0.995 3248 | 9.997 0961 | 16 | 30 |    |
|    | 40 | 9.089 6506 | 1699 | 9.092 9566 | 1731  | 0.995 5376 | 9.997 1135 | 16 | 20 |    |
|    | 50 | 9.089 8205 | 1698 | 9.093 1290 | 1731  | 0.995 7504 | 9.997 1309 | 16 | 10 |    |
| 4  | 0  | 9.089 9911 | 1697 | 9.093 3020 | 1731  | 0.995 9632 | 9.997 1483 | 16 | 0  | 56 |
|    | 10 | 9.090 1612 | 1697 | 9.093 4744 | 1731  | 0.996 1760 | 9.997 1657 | 16 | 50 |    |
|    | 20 | 9.090 3313 | 1697 | 9.093 6468 | 1731  | 0.996 3888 | 9.997 1831 | 16 | 40 |    |
|    | 30 | 9.090 5013 | 1696 | 9.093 8191 | 1731  | 0.996 6016 | 9.997 2005 | 16 | 30 |    |
|    | 40 | 9.090 6712 | 1695 | 9.093 9914 | 1731  | 0.996 8144 | 9.997 2179 | 16 | 20 |    |
|    | 50 | 9.090 8417 | 1695 | 9.094 1634 | 1731  | 0.997 0272 | 9.997 2353 | 16 | 10 |    |
| 5  | 0  | 9.091 0125 | 1694 | 9.094 3354 | 1731  | 0.997 2400 | 9.997 2527 | 16 | 0  | 55 |
|    | 10 | 9.091 1826 | 1694 | 9.094 5073 | 1731  | 0.997 4528 | 9.997 2701 | 16 | 50 |    |
|    | 20 | 9.091 3526 | 1693 | 9.094 6791 | 1731  | 0.997 6656 | 9.997 2875 | 16 | 40 |    |
|    | 30 | 9.091 5225 | 1693 | 9.094 8509 | 1731  | 0.997 8784 | 9.997 3049 | 16 | 30 |    |
|    | 40 | 9.091 6924 | 1692 | 9.095 0227 | 1731  | 0.998 0912 | 9.997 3223 | 16 | 20 |    |
|    | 50 | 9.091 8623 | 1691 | 9.095 1945 | 1731  | 0.998 3040 | 9.997 3397 | 16 | 10 |    |
| 6  | 0  | 9.092 0327 | 1690 | 9.095 3667 | 1731  | 0.998 5168 | 9.997 3571 | 16 | 0  | 54 |
|    | 10 | 9.092 2027 | 1689 | 9.095 5383 | 1730  | 0.998 7296 | 9.997 3745 | 16 | 50 |    |
|    | 20 | 9.092 3726 | 1689 | 9.095 7099 | 1730  | 0.998 9424 | 9.997 3919 | 16 | 40 |    |
|    | 30 | 9.092 5425 | 1688 | 9.095 8814 | 1730  | 0.999 1552 | 9.997 4093 | 16 | 30 |    |
|    | 40 | 9.092 7124 | 1687 | 9.096 0528 | 1730  | 0.999 3680 | 9.997 4267 | 16 | 20 |    |
|    | 50 | 9.092 8823 | 1687 | 9.096 2242 | 1730  | 0.999 5808 | 9.997 4441 | 16 | 10 |    |
| 7  | 0  | 9.093 0527 | 1686 | 9.096 3955 | 1730  | 0.999 7936 | 9.997 4615 | 16 | 0  | 53 |
|    | 10 | 9.093 2225 | 1686 | 9.096 5667 | 1730  | 0.999 9440 | 9.997 4789 | 16 | 50 |    |
|    | 20 | 9.093 3924 | 1686 | 9.096 7379 | 1730  | 1.000 1568 | 9.997 4963 | 16 | 40 |    |
|    | 30 | 9.093 5623 | 1684 | 9.096 9090 | 1730  | 1.000 3696 | 9.997 5137 | 16 | 30 |    |
|    | 40 | 9.093 7322 | 1684 | 9.097 0801 | 1730  | 1.000 5824 | 9.997 5311 | 16 | 20 |    |
|    | 50 | 9.093 9021 | 1683 | 9.097 2512 | 1730  | 1.000 7952 | 9.997 5485 | 16 | 10 |    |
| 8  | 0  | 9.094 0724 | 1682 | 9.097 4221 | 1709  | 1.001 0080 | 9.997 5659 | 16 | 0  | 52 |
|    | 10 | 9.094 2426 | 1681 | 9.097 5928 | 1708  | 1.001 2208 | 9.997 5833 | 16 | 50 |    |
|    | 20 | 9.094 4127 | 1681 | 9.097 7630 | 1709  | 1.001 4336 | 9.997 6007 | 16 | 40 |    |
|    | 30 | 9.094 5828 | 1680 | 9.097 9341 | 1706  | 1.001 6464 | 9.997 6181 | 16 | 30 |    |
|    | 40 | 9.094 7529 | 1679 | 9.098 1049 | 1703  | 1.001 8592 | 9.997 6355 | 16 | 20 |    |
|    | 50 | 9.094 9227 | 1679 | 9.098 2755 | 1703  | 1.002 0720 | 9.997 6529 | 16 | 10 |    |
| 9  | 0  | 9.095 0935 | 1678 | 9.098 4460 | 1703  | 1.002 2848 | 9.997 6703 | 16 | 0  | 51 |
|    | 10 | 9.095 2634 | 1678 | 9.098 6165 | 1704  | 1.002 4976 | 9.997 6877 | 16 | 50 |    |
|    | 20 | 9.095 4332 | 1677 | 9.098 7869 | 1704  | 1.002 7104 | 9.997 7051 | 16 | 40 |    |
|    | 30 | 9.095 6030 | 1676 | 9.098 9574 | 1703  | 1.002 9232 | 9.997 7225 | 16 | 30 |    |
|    | 40 | 9.095 7728 | 1675 | 9.099 1275 | 1703  | 1.003 1360 | 9.997 7399 | 16 | 20 |    |
|    | 50 | 9.095 9424 | 1675 | 9.099 2977 | 1701  | 1.003 3488 | 9.997 7573 | 16 | 10 |    |
| 10 | 0  | 9.096 0615 |      | 9.099 4678 |       | 1.003 5616 | 9.997 7747 | 16 | 0  | 50 |
| c  | n  | Con        | d.   | Cotg       | d. c. | Tang       | Sim        | d. | n  | c  |



|    | "  | Siu        | d.   | Tang       | d. c. | Cotg       | Cos        | d. | "  |    |
|----|----|------------|------|------------|-------|------------|------------|----|----|----|
| 10 | o  | 9.096 0615 | 1674 | 9.099 4678 | 1701  | 0.900 5322 | 9.996 5937 | 26 | o  | 50 |
| 10 | 10 | 9.096 2289 | 1674 | 9.099 6379 | 1700  | 0.900 3621 | 9.996 5911 | 27 | 50 |    |
| 20 | 20 | 9.096 3963 | 1673 | 9.099 8079 | 1699  | 0.900 1921 | 9.996 5884 | 26 | 40 |    |
| 30 | 30 | 9.096 5636 | 1672 | 9.099 9778 | 1699  | 0.900 0222 | 9.996 5858 | 27 | 30 |    |
| 40 | 40 | 9.096 7308 | 1672 | 9.100 1477 | 1698  | 0.899 8523 | 9.996 5831 | 26 | 20 |    |
| 50 | 50 | 9.096 8980 | 1671 | 9.100 3175 | 1697  | 0.899 6825 | 9.996 5805 | 27 | 10 |    |
| 11 | o  | 9.097 0651 | 1670 | 9.100 4872 | 1697  | 0.899 5128 | 9.996 5778 | 26 | o  | 49 |
| 10 | 10 | 9.097 2321 | 1669 | 9.100 6569 | 1696  | 0.899 3431 | 9.996 5752 | 27 | 50 |    |
| 20 | 20 | 9.097 3990 | 1669 | 9.100 8265 | 1696  | 0.899 1735 | 9.996 5725 | 26 | 40 |    |
| 30 | 30 | 9.097 5659 | 1669 | 9.100 9961 | 1695  | 0.899 0039 | 9.996 5699 | 27 | 30 |    |
| 40 | 40 | 9.097 7328 | 1667 | 9.101 1656 | 1694  | 0.898 8344 | 9.996 5672 | 26 | 20 |    |
| 50 | 50 | 9.097 8995 | 1667 | 9.101 3350 | 1694  | 0.898 6650 | 9.996 5645 | 27 | 10 |    |
| 12 | o  | 9.098 0662 | 1667 | 9.101 5044 | 1693  | 0.898 4956 | 9.996 5619 | 26 | o  | 48 |
| 10 | 10 | 9.098 2329 | 1666 | 9.101 6737 | 1692  | 0.898 3263 | 9.996 5592 | 27 | 50 |    |
| 20 | 20 | 9.098 3995 | 1665 | 9.101 8429 | 1692  | 0.898 1571 | 9.996 5566 | 26 | 40 |    |
| 30 | 30 | 9.098 5660 | 1664 | 9.102 0121 | 1691  | 0.897 9879 | 9.996 5539 | 27 | 30 |    |
| 40 | 40 | 9.098 7324 | 1664 | 9.102 1812 | 1690  | 0.897 8188 | 9.996 5512 | 26 | 20 |    |
| 50 | 50 | 9.098 8988 | 1663 | 9.102 3502 | 1690  | 0.897 6498 | 9.996 5486 | 27 | 10 |    |
| 18 | o  | 9.099 0651 | 1662 | 9.102 5192 | 1689  | 0.897 4808 | 9.996 5459 | 26 | o  | 47 |
| 10 | 10 | 9.099 2313 | 1662 | 9.102 6881 | 1688  | 0.897 3119 | 9.996 5432 | 27 | 50 |    |
| 20 | 20 | 9.099 3975 | 1661 | 9.102 8569 | 1688  | 0.897 1431 | 9.996 5406 | 26 | 40 |    |
| 30 | 30 | 9.099 5636 | 1661 | 9.103 0257 | 1688  | 0.896 9743 | 9.996 5379 | 27 | 30 |    |
| 40 | 40 | 9.099 7297 | 1660 | 9.103 1945 | 1686  | 0.896 8055 | 9.996 5352 | 26 | 20 |    |
| 50 | 50 | 9.099 8957 | 1659 | 9.103 3631 | 1686  | 0.896 6369 | 9.996 5326 | 27 | 10 |    |
| 14 | o  | 9.100 0616 | 1659 | 9.103 5317 | 1685  | 0.896 4683 | 9.996 5299 | 26 | o  | 46 |
| 10 | 10 | 9.100 2275 | 1658 | 9.103 7002 | 1685  | 0.896 2998 | 9.996 5272 | 27 | 50 |    |
| 20 | 20 | 9.100 3933 | 1657 | 9.103 8687 | 1684  | 0.896 1313 | 9.996 5245 | 26 | 40 |    |
| 30 | 30 | 9.100 5590 | 1657 | 9.104 0371 | 1684  | 0.895 9629 | 9.996 5219 | 27 | 30 |    |
| 40 | 40 | 9.100 7247 | 1656 | 9.104 2055 | 1683  | 0.895 7945 | 9.996 5192 | 26 | 20 |    |
| 50 | 50 | 9.100 8903 | 1655 | 9.104 3738 | 1682  | 0.895 6262 | 9.996 5165 | 27 | 10 |    |
| 15 | o  | 9.101 0558 | 1655 | 9.104 5420 | 1681  | 0.895 4580 | 9.996 5138 | 26 | o  | 45 |
| 10 | 10 | 9.101 2213 | 1654 | 9.104 7101 | 1681  | 0.895 2899 | 9.996 5112 | 27 | 50 |    |
| 20 | 20 | 9.101 3867 | 1653 | 9.104 8782 | 1680  | 0.895 1218 | 9.996 5085 | 26 | 40 |    |
| 30 | 30 | 9.101 5520 | 1653 | 9.105 0462 | 1680  | 0.894 9538 | 9.996 5058 | 27 | 30 |    |
| 40 | 40 | 9.101 7173 | 1652 | 9.105 2142 | 1679  | 0.894 7858 | 9.996 5031 | 26 | 20 |    |
| 50 | 50 | 9.101 8825 | 1652 | 9.105 3821 | 1679  | 0.894 6179 | 9.996 5004 | 27 | 10 |    |
| 16 | o  | 9.102 0477 | 1651 | 9.105 5500 | 1677  | 0.894 4500 | 9.996 4977 | 26 | o  | 44 |
| 10 | 10 | 9.102 2128 | 1650 | 9.105 7177 | 1677  | 0.894 2823 | 9.996 4951 | 27 | 50 |    |
| 20 | 20 | 9.102 3778 | 1650 | 9.105 8854 | 1677  | 0.894 1146 | 9.996 4924 | 26 | 40 |    |
| 30 | 30 | 9.102 5428 | 1649 | 9.106 0531 | 1676  | 0.893 9469 | 9.996 4897 | 27 | 30 |    |
| 40 | 40 | 9.102 7077 | 1648 | 9.106 2207 | 1675  | 0.893 7793 | 9.996 4870 | 26 | 20 |    |
| 50 | 50 | 9.102 8725 | 1648 | 9.106 3882 | 1675  | 0.893 6118 | 9.996 4843 | 27 | 10 |    |
| 17 | o  | 9.103 0373 | 1647 | 9.106 5557 | 1674  | 0.893 4443 | 9.996 4816 | 26 | o  | 43 |
| 10 | 10 | 9.103 2020 | 1647 | 9.106 7231 | 1673  | 0.893 2769 | 9.996 4789 | 27 | 50 |    |
| 20 | 20 | 9.103 3667 | 1645 | 9.106 8904 | 1673  | 0.893 1096 | 9.996 4762 | 26 | 40 |    |
| 30 | 30 | 9.103 5312 | 1646 | 9.107 0577 | 1672  | 0.892 9423 | 9.996 4735 | 27 | 30 |    |
| 40 | 40 | 9.103 6958 | 1644 | 9.107 2249 | 1672  | 0.892 7751 | 9.996 4708 | 26 | 20 |    |
| 50 | 50 | 9.103 8602 | 1644 | 9.107 3921 | 1670  | 0.892 6079 | 9.996 4682 | 27 | 10 |    |
| 18 | o  | 9.104 0246 | 1643 | 9.107 5591 | 1671  | 0.892 4409 | 9.996 4655 | 26 | o  | 42 |
| 10 | 10 | 9.104 1889 | 1643 | 9.107 7262 | 1669  | 0.892 2738 | 9.996 4628 | 27 | 50 |    |
| 20 | 20 | 9.104 3532 | 1642 | 9.107 8931 | 1669  | 0.892 1069 | 9.996 4601 | 26 | 40 |    |
| 30 | 30 | 9.104 5174 | 1641 | 9.108 0600 | 1669  | 0.891 9400 | 9.996 4574 | 27 | 30 |    |
| 40 | 40 | 9.104 6815 | 1641 | 9.108 2269 | 1668  | 0.891 7731 | 9.996 4547 | 26 | 20 |    |
| 50 | 50 | 9.104 8456 | 1640 | 9.108 3937 | 1667  | 0.891 6063 | 9.996 4520 | 27 | 10 |    |
| 19 | o  | 9.105 0096 | 1640 | 9.108 5604 | 1666  | 0.891 4396 | 9.996 4493 | 26 | o  | 41 |
| 10 | 10 | 9.105 1736 | 1639 | 9.108 7270 | 1666  | 0.891 2730 | 9.996 4466 | 27 | 50 |    |
| 20 | 20 | 9.105 3375 | 1638 | 9.108 8936 | 1666  | 0.891 1064 | 9.996 4438 | 26 | 40 |    |
| 30 | 30 | 9.105 5013 | 1638 | 9.109 0602 | 1664  | 0.890 9398 | 9.996 4411 | 27 | 30 |    |
| 40 | 40 | 9.105 6651 | 1637 | 9.109 2266 | 1664  | 0.890 7734 | 9.996 4384 | 26 | 20 |    |
| 50 | 50 | 9.105 8288 | 1636 | 9.109 3930 | 1664  | 0.890 6070 | 9.996 4357 | 27 | 10 |    |
| 20 | o  | 9.105 9924 |      | 9.109 5594 |       | 0.890 4406 | 9.996 4330 | 26 | o  | 40 |

1890

1 169  
2 338  
3 507  
4 676  
5 845  
6 1014  
7 1183  
8 1352  
9 1521

1680

1 163  
2 336  
3 504  
4 672  
5 840  
6 1008  
7 1176  
8 1344  
9 1512

1670

1 167  
2 334  
3 501  
4 668  
5 835  
6 1002  
7 1169  
8 1336  
9 1503

1660

1 166  
2 332  
3 498  
4 664  
5 830  
6 996  
7 1162  
8 1328  
9 1494

1650

1 165  
2 330  
3 495  
4 660  
5 825  
6 990  
7 1155  
8 1320  
9 1485

1640

1 164  
2 328  
3 492  
4 656  
5 820  
6 984  
7 1148  
8 1312  
9 1476

1630

1 163  
2 326  
3 489  
4 652  
5 815  
6 978  
7 1141  
8 1304  
9 1467



1660  
1 166  
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3 498  
4 664  
5 830  
6 996  
7 1162  
8 1328  
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1650  
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5 825  
6 990  
7 1155  
8 1320  
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4 656  
5 820  
6 984  
7 1148  
8 1312  
9 1476

630  
1 163  
2 326  
3 489  
4 652  
5 815  
6 978  
7 1141  
8 1304  
9 1467

1620  
1 162  
2 324  
3 486  
4 648  
5 810  
6 972  
7 1134  
8 1296  
9 1458

1610  
1 161  
2 322  
3 483  
4 644  
5 805  
6 966  
7 1127  
8 1288  
9 1449

1600  
1 160  
2 320  
3 480  
4 640  
5 800  
6 960  
7 1120  
8 1280  
9 1440

|    | "  | Sin        | d.   | Tang       | d. c. | Cotg       | Cos        | d. | "  |    |
|----|----|------------|------|------------|-------|------------|------------|----|----|----|
| 20 | 0  | 9.105 9924 | 1636 | 9.109 5594 | 1663  | 0.890 4406 | 9.996 4330 | 27 | 0  | 40 |
|    | 10 | 9.106 1560 | 1635 | 9.109 7257 | 1662  | 0.890 2743 | 9.996 4303 | 27 | 50 |    |
|    | 20 | 9.106 3195 | 1634 | 9.109 8919 | 1662  | 0.890 1081 | 9.996 4276 | 27 | 40 |    |
|    | 30 | 9.106 4829 | 1634 | 9.110 0581 | 1661  | 0.889 9419 | 9.996 4249 | 27 | 30 |    |
|    | 40 | 9.106 6463 | 1634 | 9.110 2242 | 1660  | 0.889 7758 | 9.996 4222 | 27 | 20 |    |
|    | 50 | 9.106 8097 | 1632 | 9.110 3902 | 1660  | 0.889 6098 | 9.996 4195 | 28 | 10 |    |
| 21 | 0  | 9.106 9729 | 1632 | 9.110 5562 | 1659  | 0.889 4438 | 9.996 4167 | 27 | 0  | 39 |
|    | 10 | 9.107 1361 | 1632 | 9.110 7221 | 1658  | 0.889 2779 | 9.996 4140 | 27 | 50 |    |
|    | 20 | 9.107 2993 | 1630 | 9.110 8879 | 1658  | 0.889 1121 | 9.996 4113 | 27 | 40 |    |
|    | 30 | 9.107 4623 | 1630 | 9.111 0537 | 1658  | 0.888 9463 | 9.996 4086 | 27 | 30 |    |
|    | 40 | 9.107 6253 | 1630 | 9.111 2195 | 1656  | 0.888 7805 | 9.996 4059 | 28 | 20 |    |
|    | 50 | 9.107 7883 | 1629 | 9.111 3851 | 1657  | 0.888 6149 | 9.996 4031 | 27 | 10 |    |
| 22 | 0  | 9.107 9512 | 1628 | 9.111 5508 | 1655  | 0.888 4492 | 9.996 4004 | 27 | 0  | 38 |
|    | 10 | 9.108 1140 | 1628 | 9.111 7163 | 1655  | 0.888 2837 | 9.996 3977 | 27 | 50 |    |
|    | 20 | 9.108 2768 | 1627 | 9.111 8818 | 1654  | 0.888 1182 | 9.996 3950 | 27 | 40 |    |
|    | 30 | 9.108 4395 | 1626 | 9.112 0472 | 1654  | 0.887 9528 | 9.996 3923 | 28 | 30 |    |
|    | 40 | 9.108 6021 | 1626 | 9.112 2126 | 1653  | 0.887 7874 | 9.996 3895 | 28 | 20 |    |
|    | 50 | 9.108 7647 | 1625 | 9.112 3779 | 1652  | 0.887 6221 | 9.996 3868 | 27 | 10 |    |
| 23 | 0  | 9.108 9272 | 1625 | 9.112 5431 | 1652  | 0.887 4569 | 9.996 3841 | 28 | 0  | 37 |
|    | 10 | 9.109 0897 | 1624 | 9.112 7083 | 1651  | 0.887 2917 | 9.996 3813 | 27 | 50 |    |
|    | 20 | 9.109 2521 | 1623 | 9.112 8734 | 1651  | 0.887 1266 | 9.996 3786 | 27 | 40 |    |
|    | 30 | 9.109 4144 | 1623 | 9.113 0385 | 1650  | 0.886 9615 | 9.996 3759 | 27 | 30 |    |
|    | 40 | 9.109 5767 | 1622 | 9.113 2035 | 1650  | 0.886 7965 | 9.996 3732 | 28 | 20 |    |
|    | 50 | 9.109 7389 | 1621 | 9.113 3685 | 1648  | 0.886 6315 | 9.996 3704 | 27 | 10 |    |
| 24 | 0  | 9.109 9010 | 1621 | 9.113 5333 | 1649  | 0.886 4667 | 9.996 3677 | 28 | 0  | 36 |
|    | 10 | 9.110 0631 | 1620 | 9.113 6982 | 1647  | 0.886 3018 | 9.996 3649 | 27 | 50 |    |
|    | 20 | 9.110 2251 | 1620 | 9.113 8629 | 1647  | 0.886 1371 | 9.996 3622 | 27 | 40 |    |
|    | 30 | 9.110 3871 | 1619 | 9.114 0276 | 1646  | 0.885 9724 | 9.996 3595 | 28 | 30 |    |
|    | 40 | 9.110 5490 | 1618 | 9.114 1922 | 1646  | 0.885 8078 | 9.996 3567 | 28 | 20 |    |
|    | 50 | 9.110 7108 | 1618 | 9.114 3568 | 1645  | 0.885 6432 | 9.996 3540 | 27 | 10 |    |
| 25 | 0  | 9.110 8726 | 1617 | 9.114 5213 | 1645  | 0.885 4787 | 9.996 3513 | 28 | 0  | 35 |
|    | 10 | 9.111 0343 | 1617 | 9.114 6858 | 1644  | 0.885 3142 | 9.996 3485 | 27 | 50 |    |
|    | 20 | 9.111 1960 | 1616 | 9.114 8502 | 1643  | 0.885 1498 | 9.996 3458 | 28 | 40 |    |
|    | 30 | 9.111 3576 | 1615 | 9.115 0145 | 1643  | 0.884 9855 | 9.996 3430 | 27 | 30 |    |
|    | 40 | 9.111 5191 | 1615 | 9.115 1788 | 1642  | 0.884 8212 | 9.996 3403 | 28 | 20 |    |
|    | 50 | 9.111 6806 | 1614 | 9.115 3430 | 1642  | 0.884 6570 | 9.996 3375 | 27 | 10 |    |
| 26 | 0  | 9.111 8420 | 1613 | 9.115 5072 | 1641  | 0.884 4928 | 9.996 3348 | 28 | 0  | 34 |
|    | 10 | 9.112 0033 | 1613 | 9.115 6713 | 1640  | 0.884 3287 | 9.996 3320 | 27 | 50 |    |
|    | 20 | 9.112 1646 | 1613 | 9.115 8353 | 1640  | 0.884 1647 | 9.996 3293 | 28 | 40 |    |
|    | 30 | 9.112 3259 | 1611 | 9.115 9993 | 1639  | 0.884 0007 | 9.996 3265 | 27 | 30 |    |
|    | 40 | 9.112 4870 | 1611 | 9.116 1632 | 1639  | 0.883 8368 | 9.996 3238 | 28 | 20 |    |
|    | 50 | 9.112 6481 | 1611 | 9.116 3271 | 1638  | 0.883 6729 | 9.996 3210 | 28 | 10 |    |
| 27 | 0  | 9.112 8092 | 1610 | 9.116 4909 | 1637  | 0.883 5091 | 9.996 3183 | 27 | 0  | 33 |
|    | 10 | 9.112 9702 | 1609 | 9.116 6546 | 1637  | 0.883 3454 | 9.996 3155 | 27 | 50 |    |
|    | 20 | 9.113 1311 | 1609 | 9.116 8183 | 1636  | 0.883 1817 | 9.996 3128 | 28 | 40 |    |
|    | 30 | 9.113 2920 | 1608 | 9.116 9819 | 1636  | 0.883 0181 | 9.996 3100 | 28 | 30 |    |
|    | 40 | 9.113 4528 | 1607 | 9.117 1455 | 1635  | 0.882 8545 | 9.996 3073 | 28 | 20 |    |
|    | 50 | 9.113 6135 | 1607 | 9.117 3090 | 1634  | 0.882 6910 | 9.996 3045 | 28 | 10 |    |
| 28 | 0  | 9.113 7742 | 1606 | 9.117 4724 | 1634  | 0.882 5276 | 9.996 3018 | 27 | 0  | 32 |
|    | 10 | 9.113 9348 | 1606 | 9.117 6358 | 1633  | 0.882 3642 | 9.996 2990 | 28 | 50 |    |
|    | 20 | 9.114 0954 | 1605 | 9.117 7991 | 1633  | 0.882 2009 | 9.996 2962 | 27 | 40 |    |
|    | 30 | 9.114 2559 | 1604 | 9.117 9624 | 1632  | 0.882 0376 | 9.996 2935 | 28 | 30 |    |
|    | 40 | 9.114 4163 | 1604 | 9.118 1256 | 1631  | 0.881 8744 | 9.996 2907 | 28 | 20 |    |
|    | 50 | 9.114 5767 | 1603 | 9.118 2887 | 1631  | 0.881 7113 | 9.996 2879 | 28 | 10 |    |
| 29 | 0  | 9.114 7370 | 1603 | 9.118 4518 | 1631  | 0.881 5482 | 9.996 2852 | 27 | 0  | 31 |
|    | 10 | 9.114 8973 | 1602 | 9.118 6149 | 1629  | 0.881 3851 | 9.996 2824 | 28 | 50 |    |
|    | 20 | 9.115 0575 | 1601 | 9.118 7778 | 1629  | 0.881 2222 | 9.996 2796 | 28 | 40 |    |
|    | 30 | 9.115 2176 | 1601 | 9.118 9407 | 1629  | 0.881 0593 | 9.996 2769 | 28 | 30 |    |
|    | 40 | 9.115 3777 | 1600 | 9.119 1036 | 1628  | 0.880 8964 | 9.996 2741 | 28 | 20 |    |
|    | 50 | 9.115 5377 | 1600 | 9.119 2664 | 1627  | 0.880 7336 | 9.996 2713 | 28 | 10 |    |
| 30 | 0  | 9.115 6977 |      | 9.119 4291 |       | 0.880 5709 | 9.996 2686 | 27 | 0  | 30 |
|    |    |            |      |            |       |            |            |    |    |    |
|    |    | Cos        | d.   | Cotg       | d. c. | Tang       | Sin        | d. | "  |    |



| i  | "  | Sin        | d.   | Tang       | d. c. | Cotg       | Cos        | d. | "  | i  |
|----|----|------------|------|------------|-------|------------|------------|----|----|----|
| 30 | o  | 9.115 6977 | 1599 | 9.119 4291 | 1627  | 0.880 5709 | 9.996 2686 | 28 | o  | 30 |
|    | 10 | 9.115 8576 | 1598 | 9.119 5918 | 1626  | 0.880 4082 | 9.996 2658 | 28 | 50 |    |
|    | 20 | 9.116 0174 | 1598 | 9.119 7544 | 1625  | 0.880 2456 | 9.996 2630 | 28 | 40 |    |
|    | 30 | 9.116 1772 | 1597 | 9.119 9169 | 1625  | 0.880 0831 | 9.996 2602 | 28 | 30 |    |
|    | 40 | 9.116 3369 | 1597 | 9.120 0794 | 1625  | 0.879 9206 | 9.996 2575 | 28 | 20 |    |
|    | 50 | 9.116 4966 | 1596 | 9.120 2419 | 1624  | 0.879 7581 | 9.996 2547 | 28 | 10 |    |
| 31 | o  | 9.116 6562 | 1595 | 9.120 4043 | 1623  | 0.879 5957 | 9.996 2519 | 28 | o  | 29 |
|    | 10 | 9.116 8157 | 1595 | 9.120 5666 | 1622  | 0.879 4334 | 9.996 2491 | 27 | 50 |    |
|    | 20 | 9.116 9752 | 1594 | 9.120 7288 | 1622  | 0.879 2712 | 9.996 2464 | 28 | 40 |    |
|    | 30 | 9.117 1346 | 1594 | 9.120 8910 | 1622  | 0.879 1090 | 9.996 2436 | 28 | 30 |    |
|    | 40 | 9.117 2940 | 1593 | 9.121 0532 | 1621  | 0.878 9468 | 9.996 2408 | 28 | 20 |    |
|    | 50 | 9.117 4533 | 1592 | 9.121 2153 | 1620  | 0.878 7847 | 9.996 2380 | 28 | 10 |    |
| 32 | o  | 9.117 6125 | 1592 | 9.121 3773 | 1620  | 0.878 6227 | 9.996 2352 | 28 | o  | 28 |
|    | 10 | 9.117 7717 | 1591 | 9.121 5393 | 1619  | 0.878 4607 | 9.996 2324 | 27 | 50 |    |
|    | 20 | 9.117 9308 | 1591 | 9.121 7012 | 1618  | 0.878 2988 | 9.996 2297 | 28 | 40 |    |
|    | 30 | 9.118 0899 | 1590 | 9.121 8630 | 1618  | 0.878 1370 | 9.996 2269 | 28 | 30 |    |
|    | 40 | 9.118 2489 | 1590 | 9.122 0248 | 1618  | 0.877 9752 | 9.996 2241 | 28 | 20 |    |
|    | 50 | 9.118 4079 | 1588 | 9.122 1866 | 1616  | 0.877 8134 | 9.996 2213 | 28 | 10 |    |
| 33 | o  | 9.118 5667 | 1589 | 9.122 3482 | 1617  | 0.877 6518 | 9.996 2185 | 28 | o  | 27 |
|    | 10 | 9.118 7256 | 1587 | 9.122 5099 | 1615  | 0.877 4901 | 9.996 2157 | 28 | 50 |    |
|    | 20 | 9.118 8843 | 1588 | 9.122 6714 | 1615  | 0.877 3286 | 9.996 2129 | 28 | 40 |    |
|    | 30 | 9.119 0431 | 1586 | 9.122 8329 | 1615  | 0.877 1671 | 9.996 2101 | 28 | 30 |    |
|    | 40 | 9.119 2017 | 1586 | 9.122 9944 | 1614  | 0.877 0056 | 9.996 2073 | 28 | 20 |    |
|    | 50 | 9.119 3603 | 1585 | 9.123 1558 | 1613  | 0.876 8442 | 9.996 2045 | 28 | 10 |    |
| 34 | o  | 9.119 5188 | 1585 | 9.123 3171 | 1613  | 0.876 6829 | 9.996 2017 | 28 | o  | 26 |
|    | 10 | 9.119 6773 | 1584 | 9.123 4784 | 1612  | 0.876 5216 | 9.996 1989 | 28 | 50 |    |
|    | 20 | 9.119 8357 | 1584 | 9.123 6396 | 1611  | 0.876 3604 | 9.996 1961 | 28 | 40 |    |
|    | 30 | 9.119 9941 | 1583 | 9.123 8007 | 1611  | 0.876 1993 | 9.996 1933 | 28 | 30 |    |
|    | 40 | 9.120 1524 | 1582 | 9.123 9618 | 1611  | 0.876 0382 | 9.996 1905 | 28 | 20 |    |
|    | 50 | 9.120 3106 | 1582 | 9.124 1229 | 1610  | 0.875 8771 | 9.996 1877 | 28 | 10 |    |
| 35 | o  | 9.120 4688 | 1581 | 9.124 2839 | 1609  | 0.875 7161 | 9.996 1849 | 28 | o  | 25 |
|    | 10 | 9.120 6269 | 1581 | 9.124 4448 | 1609  | 0.875 5552 | 9.996 1821 | 28 | 50 |    |
|    | 20 | 9.120 7850 | 1580 | 9.124 6057 | 1608  | 0.875 3943 | 9.996 1793 | 28 | 40 |    |
|    | 30 | 9.120 9430 | 1579 | 9.124 7665 | 1607  | 0.875 2335 | 9.996 1765 | 28 | 30 |    |
|    | 40 | 9.121 1009 | 1579 | 9.124 9272 | 1607  | 0.875 0728 | 9.996 1737 | 28 | 20 |    |
|    | 50 | 9.121 2588 | 1579 | 9.125 0879 | 1607  | 0.874 9121 | 9.996 1709 | 28 | 10 |    |
| 36 | o  | 9.121 4167 | 1577 | 9.125 2486 | 1605  | 0.874 7514 | 9.996 1681 | 28 | o  | 24 |
|    | 10 | 9.121 5744 | 1578 | 9.125 4091 | 1606  | 0.874 5909 | 9.996 1653 | 28 | 50 |    |
|    | 20 | 9.121 7322 | 1576 | 9.125 5697 | 1604  | 0.874 4303 | 9.996 1625 | 28 | 40 |    |
|    | 30 | 9.121 8898 | 1576 | 9.125 7301 | 1604  | 0.874 2699 | 9.996 1597 | 28 | 30 |    |
|    | 40 | 9.122 0474 | 1575 | 9.125 8905 | 1604  | 0.874 1095 | 9.996 1569 | 29 | 20 |    |
|    | 50 | 9.122 2049 | 1575 | 9.126 0509 | 1603  | 0.873 9491 | 9.996 1540 | 28 | 10 |    |
| 37 | o  | 9.122 3624 | 1574 | 9.126 2112 | 1602  | 0.873 7888 | 9.996 1512 | 28 | o  | 23 |
|    | 10 | 9.122 5198 | 1574 | 9.126 3714 | 1602  | 0.873 6286 | 9.996 1484 | 28 | 50 |    |
|    | 20 | 9.122 6772 | 1573 | 9.126 5316 | 1601  | 0.873 4684 | 9.996 1456 | 28 | 40 |    |
|    | 30 | 9.122 8345 | 1573 | 9.126 6917 | 1601  | 0.873 3083 | 9.996 1428 | 28 | 30 |    |
|    | 40 | 9.122 9918 | 1572 | 9.126 8518 | 1600  | 0.873 1482 | 9.996 1400 | 29 | 20 |    |
|    | 50 | 9.123 1490 | 1571 | 9.127 0118 | 1600  | 0.872 9882 | 9.996 1371 | 28 | 10 |    |
| 38 | o  | 9.123 3061 | 1571 | 9.127 1718 | 1599  | 0.872 8282 | 9.996 1343 | 28 | o  | 22 |
|    | 10 | 9.123 4632 | 1570 | 9.127 3317 | 1598  | 0.872 6683 | 9.996 1315 | 28 | 50 |    |
|    | 20 | 9.123 6202 | 1569 | 9.127 4915 | 1598  | 0.872 5085 | 9.996 1287 | 29 | 40 |    |
|    | 30 | 9.123 7771 | 1569 | 9.127 6513 | 1597  | 0.872 3487 | 9.996 1258 | 28 | 30 |    |
|    | 40 | 9.123 9340 | 1569 | 9.127 8110 | 1597  | 0.872 1890 | 9.996 1230 | 28 | 20 |    |
|    | 50 | 9.124 0909 | 1568 | 9.127 9707 | 1596  | 0.872 0293 | 9.996 1202 | 28 | 10 |    |
| 39 | o  | 9.124 2477 | 1567 | 9.128 1303 | 1596  | 0.871 8697 | 9.996 1174 | 29 | o  | 21 |
|    | 10 | 9.124 4044 | 1567 | 9.128 2899 | 1595  | 0.871 7101 | 9.996 1145 | 28 | 50 |    |
|    | 20 | 9.124 5611 | 1566 | 9.128 4494 | 1594  | 0.871 5506 | 9.996 1117 | 28 | 40 |    |
|    | 30 | 9.124 7177 | 1565 | 9.128 6088 | 1594  | 0.871 3912 | 9.996 1089 | 29 | 30 |    |
|    | 40 | 9.124 8742 | 1565 | 9.128 7682 | 1593  | 0.871 2318 | 9.996 1060 | 29 | 20 |    |
|    | 50 | 9.125 0307 | 1565 | 9.128 9275 | 1593  | 0.871 0725 | 9.996 1032 | 28 | 10 |    |
| 40 | o  | 9.125 1872 |      | 9.129 0868 |       | 0.870 9132 | 9.996 1004 | 28 | o  | 20 |
| i  | "  | Cos        | d.   | Cotg       | d. c. | Tang       | Sin        | d. | "  | i  |

1620

1 161

2 325

3 486

4 648

5 810

6 972

7 1134

8 1296

9 1458

1610

1 161

2 322

3 483

4 644

5 805

6 966

7 1127

8 1288

9 1449

1600

1 160

2 320

3 480

4 640

5 800

6 960

7 1120

8 1280

9 1440

1590

1 159

2 318

3 477

4 636

5 795

6 954

7 1113

8 1272

9 1431

1580

1 158

2 316

3 474

4 632

5 790

6 948

7 1106

8 1264

9 1422

1570

1 157

2 314

3 471

4 628

5 785

6 942

7 1099

8 1256

9 1413

1560

1 156

2 312

3 468

4 624

5 780

6 936

7 1092

8 1248

9 1404



|      |    |    | sin        | d.   | Tang       | d. c. | Cotg       | Con         | d. |    |    |
|------|----|----|------------|------|------------|-------|------------|-------------|----|----|----|
| 1500 | 40 | 0  | 9.125 1872 | 1564 | 9.129 0868 | 1592  | 0.839 9132 | 9.996 10-17 | 29 | 0  | 20 |
| 1    | 10 | 10 | 9.125 3436 | 1564 | 9.129 2432 | 1592  | 0.839 7568 | 9.996 0975  | 28 | 50 |    |
| 2    | 20 | 20 | 9.125 4999 | 1564 | 9.129 4005 | 1592  | 0.839 6005 | 9.996 0942  | 28 | 40 |    |
| 3    | 30 | 30 | 9.125 6562 | 1564 | 9.129 5568 | 1592  | 0.839 4442 | 9.996 0909  | 29 | 30 |    |
| 4    | 40 | 40 | 9.125 8125 | 1564 | 9.129 7131 | 1592  | 0.839 2879 | 9.996 0876  | 28 | 20 |    |
| 5    | 50 | 50 | 9.125 9688 | 1564 | 9.129 8694 | 1592  | 0.839 1317 | 9.996 0843  | 28 | 10 |    |
| 6    | 60 | 0  | 9.126 1251 | 1564 | 9.130 0257 | 1589  | 0.839 9757 | 9.996 0811  | 29 | 0  | 19 |
| 7    | 10 | 10 | 9.126 2814 | 1560 | 9.130 2000 | 1589  | 0.839 8194 | 9.996 0779  | 29 | 50 |    |
| 8    | 20 | 20 | 9.126 4377 | 1559 | 9.130 3563 | 1589  | 0.839 6631 | 9.996 0746  | 29 | 40 |    |
| 9    | 30 | 30 | 9.126 5940 | 1559 | 9.130 5126 | 1589  | 0.839 5068 | 9.996 0714  | 29 | 30 |    |
| 1580 | 40 | 40 | 9.126 7503 | 1558 | 9.130 6689 | 1586  | 0.839 3505 | 9.996 0681  | 29 | 20 |    |
| 1    | 50 | 50 | 9.126 9066 | 1557 | 9.130 8252 | 1586  | 0.839 1942 | 9.996 0649  | 29 | 10 |    |
| 2    | 0  | 0  | 9.127 0629 | 1557 | 9.130 9815 | 1586  | 0.839 0379 | 9.996 0616  | 29 | 0  | 18 |
| 3    | 10 | 10 | 9.127 2192 | 1557 | 9.131 1378 | 1585  | 0.838 8816 | 9.996 0584  | 29 | 50 |    |
| 4    | 20 | 20 | 9.127 3755 | 1555 | 9.131 2941 | 1585  | 0.838 7253 | 9.996 0551  | 29 | 40 |    |
| 5    | 30 | 30 | 9.127 5318 | 1555 | 9.131 4504 | 1585  | 0.838 5690 | 9.996 0519  | 29 | 30 |    |
| 6    | 40 | 40 | 9.127 6881 | 1555 | 9.131 6067 | 1585  | 0.838 4127 | 9.996 0486  | 29 | 20 |    |
| 7    | 50 | 50 | 9.127 8444 | 1554 | 9.131 7630 | 1584  | 0.838 2564 | 9.996 0454  | 29 | 10 |    |
| 8    | 0  | 0  | 9.127 9997 | 1553 | 9.131 9193 | 1584  | 0.838 1001 | 9.996 0421  | 29 | 0  | 17 |
| 9    | 10 | 10 | 9.128 1560 | 1553 | 9.132 0756 | 1584  | 0.837 9438 | 9.996 0389  | 29 | 50 |    |
| 1570 | 20 | 20 | 9.128 3123 | 1551 | 9.132 2319 | 1584  | 0.837 7875 | 9.996 0356  | 29 | 40 |    |
| 1    | 30 | 30 | 9.128 4686 | 1551 | 9.132 3882 | 1584  | 0.837 6312 | 9.996 0324  | 29 | 30 |    |
| 2    | 40 | 40 | 9.128 6249 | 1551 | 9.132 5445 | 1584  | 0.837 4749 | 9.996 0291  | 29 | 20 |    |
| 3    | 50 | 50 | 9.128 7812 | 1551 | 9.132 7008 | 1584  | 0.837 3186 | 9.996 0259  | 29 | 10 |    |
| 4    | 0  | 0  | 9.128 9375 | 1550 | 9.132 8571 | 1584  | 0.837 1623 | 9.996 0226  | 29 | 0  | 16 |
| 5    | 10 | 10 | 9.129 0938 | 1550 | 9.133 0134 | 1584  | 0.837 0060 | 9.996 0194  | 29 | 50 |    |
| 6    | 20 | 20 | 9.129 2501 | 1549 | 9.133 1697 | 1584  | 0.836 8497 | 9.996 0161  | 29 | 40 |    |
| 7    | 30 | 30 | 9.129 4064 | 1548 | 9.133 3260 | 1584  | 0.836 6934 | 9.996 0129  | 29 | 30 |    |
| 8    | 40 | 40 | 9.129 5627 | 1548 | 9.133 4823 | 1584  | 0.836 5371 | 9.996 0096  | 29 | 20 |    |
| 9    | 50 | 50 | 9.129 7190 | 1547 | 9.133 6386 | 1584  | 0.836 3808 | 9.996 0064  | 29 | 10 |    |
| 1560 | 45 | 0  | 9.129 8753 | 1547 | 9.133 7949 | 1584  | 0.836 2245 | 9.996 0031  | 29 | 0  | 15 |
| 1    | 10 | 10 | 9.130 0316 | 1547 | 9.133 9512 | 1583  | 0.836 0682 | 9.996 0000  | 29 | 50 |    |
| 2    | 20 | 20 | 9.130 1879 | 1545 | 9.134 1075 | 1583  | 0.835 9119 | 9.995 9967  | 29 | 40 |    |
| 3    | 30 | 30 | 9.130 3442 | 1545 | 9.134 2638 | 1583  | 0.835 7556 | 9.995 9935  | 29 | 30 |    |
| 4    | 40 | 40 | 9.130 4995 | 1545 | 9.134 4201 | 1583  | 0.835 5993 | 9.995 9902  | 29 | 20 |    |
| 5    | 50 | 50 | 9.130 6558 | 1544 | 9.134 5764 | 1583  | 0.835 4430 | 9.995 9870  | 29 | 10 |    |
| 6    | 0  | 0  | 9.130 8121 | 1543 | 9.134 7327 | 1583  | 0.835 2867 | 9.995 9837  | 29 | 0  | 14 |
| 7    | 10 | 10 | 9.130 9684 | 1543 | 9.134 8890 | 1583  | 0.835 1304 | 9.995 9805  | 29 | 50 |    |
| 8    | 20 | 20 | 9.131 1247 | 1543 | 9.135 0453 | 1583  | 0.834 9741 | 9.995 9772  | 29 | 40 |    |
| 9    | 30 | 30 | 9.131 2810 | 1543 | 9.135 2016 | 1583  | 0.834 8178 | 9.995 9740  | 29 | 30 |    |
| 1550 | 40 | 40 | 9.131 4373 | 1542 | 9.135 3579 | 1583  | 0.834 6615 | 9.995 9707  | 29 | 20 |    |
| 1    | 50 | 50 | 9.131 5936 | 1542 | 9.135 5142 | 1583  | 0.834 5052 | 9.995 9675  | 29 | 10 |    |
| 2    | 0  | 0  | 9.131 7499 | 1541 | 9.135 6705 | 1583  | 0.834 3489 | 9.995 9642  | 29 | 0  | 13 |
| 3    | 10 | 10 | 9.131 9062 | 1541 | 9.135 8268 | 1583  | 0.834 1926 | 9.995 9610  | 29 | 50 |    |
| 4    | 20 | 20 | 9.132 0625 | 1540 | 9.135 9831 | 1583  | 0.834 0363 | 9.995 9577  | 29 | 40 |    |
| 5    | 30 | 30 | 9.132 2188 | 1540 | 9.136 1394 | 1583  | 0.833 8800 | 9.995 9545  | 29 | 30 |    |
| 6    | 40 | 40 | 9.132 3751 | 1539 | 9.136 2957 | 1583  | 0.833 7237 | 9.995 9512  | 29 | 20 |    |
| 7    | 50 | 50 | 9.132 5314 | 1538 | 9.136 4520 | 1583  | 0.833 5674 | 9.995 9480  | 29 | 10 |    |
| 8    | 0  | 0  | 9.132 6877 | 1537 | 9.136 6083 | 1583  | 0.833 4111 | 9.995 9447  | 29 | 0  | 12 |
| 9    | 10 | 10 | 9.132 8440 | 1536 | 9.136 7646 | 1583  | 0.833 2548 | 9.995 9415  | 29 | 50 |    |
| 1540 | 20 | 20 | 9.132 9993 | 1536 | 9.136 9209 | 1583  | 0.833 0985 | 9.995 9382  | 29 | 40 |    |
| 1    | 30 | 30 | 9.133 1556 | 1535 | 9.137 0772 | 1583  | 0.832 9422 | 9.995 9350  | 29 | 30 |    |
| 2    | 40 | 40 | 9.133 3119 | 1534 | 9.137 2335 | 1583  | 0.832 7859 | 9.995 9317  | 29 | 20 |    |
| 3    | 50 | 50 | 9.133 4682 | 1534 | 9.137 3898 | 1583  | 0.832 6296 | 9.995 9285  | 29 | 10 |    |
| 4    | 0  | 0  | 9.133 6245 | 1533 | 9.137 5461 | 1583  | 0.832 4733 | 9.995 9252  | 29 | 0  | 11 |
| 5    | 10 | 10 | 9.133 7808 | 1533 | 9.137 7024 | 1583  | 0.832 3170 | 9.995 9220  | 29 | 50 |    |
| 6    | 20 | 20 | 9.133 9371 | 1532 | 9.137 8587 | 1583  | 0.832 1607 | 9.995 9187  | 29 | 40 |    |
| 7    | 30 | 30 | 9.134 0934 | 1532 | 9.138 0150 | 1583  | 0.832 0044 | 9.995 9155  | 29 | 30 |    |
| 8    | 40 | 40 | 9.134 2497 | 1531 | 9.138 1713 | 1583  | 0.831 8481 | 9.995 9122  | 29 | 20 |    |
| 9    | 50 | 50 | 9.134 4060 | 1531 | 9.138 3276 | 1583  | 0.831 6918 | 9.995 9090  | 29 | 10 |    |
| 1530 | 40 | 0  | 9.134 5623 | 1531 | 9.138 4839 | 1583  | 0.831 5355 | 9.995 9057  | 29 | 0  | 10 |
| 1    | 10 | 10 | 9.134 7186 | 1530 | 9.138 6402 | 1583  | 0.831 3792 | 9.995 9025  | 29 | 50 |    |
| 2    | 20 | 20 | 9.134 8749 | 1530 | 9.138 7965 | 1583  | 0.831 2229 | 9.995 8992  | 29 | 40 |    |
| 3    | 30 | 30 | 9.135 0312 | 1530 | 9.138 9528 | 1583  | 0.831 0666 | 9.995 8960  | 29 | 30 |    |
| 4    | 40 | 40 | 9.135 1875 | 1530 | 9.139 1091 | 1583  | 0.830 9103 | 9.995 8927  | 29 | 20 |    |
| 5    | 50 | 50 | 9.135 3438 | 1530 | 9.139 2654 | 1583  | 0.830 7540 | 9.995 8895  | 29 | 10 |    |
| 6    | 0  | 0  | 9.135 5001 | 1530 | 9.139 4217 | 1583  | 0.830 5977 | 9.995 8862  | 29 | 0  | 9  |
| 7    | 10 | 10 | 9.135 6564 | 1530 | 9.139 5780 | 1583  | 0.830 4414 | 9.995 8830  | 29 | 50 |    |
| 8    | 20 | 20 | 9.135 8127 | 1530 | 9.139 7343 | 1583  | 0.830 2851 | 9.995 8797  | 29 | 40 |    |
| 9    | 30 | 30 | 9.135 9690 | 1530 | 9.139 8906 | 1583  | 0.830 1288 | 9.995 8765  | 29 | 30 |    |
| 1520 | 40 | 40 | 9.136 1253 | 1530 | 9.140 0469 | 1583  | 0.830 0725 | 9.995 8732  | 29 | 20 |    |
| 1    | 50 | 50 | 9.136 2816 | 1530 | 9.140 2032 | 1583  | 0.829 9162 | 9.995 8700  | 29 | 10 |    |
| 2    | 0  | 0  | 9.136 4379 | 1530 | 9.140 3595 | 1583  | 0.829 7599 | 9.995 8667  | 29 | 0  | 8  |
| 3    | 10 | 10 | 9.136 5942 | 1530 | 9.140 5158 | 1583  | 0.829 6036 | 9.995 8635  | 29 | 50 |    |
| 4    | 20 | 20 | 9.136 7505 | 1530 | 9.140 6721 | 1583  | 0.829 4473 | 9.995 8602  | 29 | 40 |    |
| 5    | 30 | 30 | 9.136 9068 | 1530 | 9.140 8284 | 1583  | 0.829 2910 | 9.995 8570  | 29 | 30 |    |
| 6    | 40 | 40 | 9.137 0631 | 1530 | 9.140 9847 | 1583  | 0.829 1347 | 9.995 8537  | 29 | 20 |    |
| 7    | 50 | 50 | 9.137 2194 | 1530 | 9.141 1410 | 1583  | 0.828 9784 | 9.995 8505  | 29 | 10 |    |
| 8    | 0  | 0  | 9.137 3757 | 1530 | 9.141 2973 | 1583  | 0.828 8221 | 9.995 8472  | 29 | 0  | 7  |
| 9    | 10 | 10 | 9.137 5320 | 1530 | 9.141 4536 | 1583  | 0.828 6658 | 9.995 8440  | 29 | 50 |    |
| 1510 | 20 | 20 | 9.137 6883 | 1530 | 9.141 6099 | 1583  | 0.828 5095 | 9.995 8407  | 29 | 40 |    |
| 1    | 30 | 30 | 9.137 8446 | 1530 | 9.141 7662 | 1583  | 0.828 3532 | 9.995 8375  | 29 | 30 |    |
| 2    | 40 | 40 | 9.138 0009 | 1530 | 9.141 9225 | 1583  | 0.828 1969 | 9.995 8342  | 29 | 20 |    |
| 3    | 50 | 50 | 9.138 1572 | 1530 | 9.142 0788 | 1583  | 0.828 0406 | 9.995 8310  | 29 | 10 |    |
| 4    | 0  | 0  | 9.138 3135 | 1530 | 9.142 2351 | 1583  | 0.827 8843 | 9.995 8277  | 29 | 0  | 6  |
| 5    | 10 | 10 | 9.138 4698 | 1530 | 9.142 3914 | 1583  | 0.827 7280 | 9.995 8245  | 29 | 50 |    |
| 6    | 20 | 20 | 9.138 6261 | 1530 | 9.142 5477 | 1583  | 0.827 5717 | 9.995 8212  | 29 | 40 |    |
| 7    | 30 | 30 | 9.138 7824 | 1530 | 9.142 7040 | 1583  | 0.827 4154 | 9.995 8180  | 29 | 30 |    |
| 8    | 40 | 40 | 9.138 9387 | 1530 | 9.142 8603 | 1583  | 0.827 2591 | 9.995 8147  | 29 | 20 |    |
| 9    | 50 | 50 | 9.139 0950 | 1530 | 9.143 0166 | 1583  | 0.827 1028 | 9.995 8115  | 29 | 10 |    |
| 1500 | 40 | 0  | 9.139 2513 | 1530 | 9.143 1729 | 1583  | 0.826 9465 | 9.995 8082  | 29 | 0  | 5  |



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|----|------|
| 1  | 1560 |
| 2  | 156  |
| 3  | 312  |
| 4  | 468  |
| 5  | 624  |
| 6  | 780  |
| 7  | 936  |
| 8  | 1092 |
| 9  | 1248 |
| 10 | 1404 |
| 11 | 1560 |
| 12 | 155  |
| 1  | 310  |
| 2  | 465  |
| 3  | 620  |
| 4  | 775  |
| 5  | 930  |
| 6  | 1085 |
| 7  | 1240 |
| 8  | 1395 |
| 9  | 1550 |
| 10 | 1540 |
| 11 | 154  |
| 12 | 308  |
| 1  | 462  |
| 2  | 616  |
| 3  | 770  |
| 4  | 924  |
| 5  | 1078 |
| 6  | 1232 |
| 7  | 1386 |
| 8  | 1540 |
| 9  | 1530 |
| 10 | 153  |
| 11 | 306  |
| 12 | 459  |
| 1  | 612  |
| 2  | 766  |
| 3  | 918  |
| 4  | 1071 |
| 5  | 1224 |
| 6  | 1377 |
| 7  | 1530 |
| 8  | 1520 |
| 9  | 152  |
| 10 | 304  |
| 11 | 456  |
| 12 | 608  |
| 1  | 760  |
| 2  | 914  |
| 3  | 1064 |
| 4  | 1216 |
| 5  | 1368 |
| 6  | 1510 |
| 7  | 151  |
| 8  | 302  |
| 9  | 453  |
| 10 | 604  |
| 11 | 755  |
| 12 | 906  |
| 1  | 1057 |
| 2  | 1208 |
| 3  | 1359 |
| 4  | 1500 |
| 5  | 150  |
| 6  | 300  |
| 7  | 450  |
| 8  | 600  |
| 9  | 750  |
| 10 | 900  |
| 11 | 1050 |
| 12 | 1200 |
| 1  | 1350 |
| 2  | 1500 |



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| i  | n  | Rin        | d.   | Tang       | d.c  | Colg       | Con        | d.   | n  | i  |
|----|----|------------|------|------------|------|------------|------------|------|----|----|
| 0  | 0  | 9.141 5554 | 1498 | 9.141 5554 | 1498 | 9.141 5554 | 9.141 5554 | 1498 | 0  | 60 |
|    | 10 | 9.141 7054 | 1497 | 9.141 7054 | 1497 | 9.141 7054 | 9.141 7054 | 1497 | 50 |    |
|    | 20 | 9.141 8543 | 1496 | 9.141 8543 | 1496 | 9.141 8543 | 9.141 8543 | 1496 | 40 |    |
|    | 30 | 9.141 0033 | 1495 | 9.141 0033 | 1495 | 9.141 0033 | 9.141 0033 | 1495 | 30 |    |
|    | 40 | 9.141 1511 | 1494 | 9.141 1511 | 1494 | 9.141 1511 | 9.141 1511 | 1494 | 20 |    |
|    | 50 | 9.141 3017 | 1493 | 9.141 3017 | 1493 | 9.141 3017 | 9.141 3017 | 1493 | 10 |    |
| 1  | 0  | 9.141 4514 | 1492 | 9.141 4514 | 1492 | 9.141 4514 | 9.141 4514 | 1492 | 0  | 50 |
|    | 10 | 9.141 6017 | 1491 | 9.141 6017 | 1491 | 9.141 6017 | 9.141 6017 | 1491 | 50 |    |
|    | 20 | 9.141 7514 | 1490 | 9.141 7514 | 1490 | 9.141 7514 | 9.141 7514 | 1490 | 40 |    |
|    | 30 | 9.141 9014 | 1489 | 9.141 9014 | 1489 | 9.141 9014 | 9.141 9014 | 1489 | 30 |    |
|    | 40 | 9.142 0508 | 1488 | 9.142 0508 | 1488 | 9.142 0508 | 9.142 0508 | 1488 | 20 |    |
|    | 50 | 9.142 2004 | 1487 | 9.142 2004 | 1487 | 9.142 2004 | 9.142 2004 | 1487 | 10 |    |
| 2  | 0  | 9.142 3491 | 1486 | 9.142 3491 | 1486 | 9.142 3491 | 9.142 3491 | 1486 | 0  | 58 |
|    | 10 | 9.142 4985 | 1485 | 9.142 4985 | 1485 | 9.142 4985 | 9.142 4985 | 1485 | 50 |    |
|    | 20 | 9.142 6476 | 1484 | 9.142 6476 | 1484 | 9.142 6476 | 9.142 6476 | 1484 | 40 |    |
|    | 30 | 9.142 7966 | 1483 | 9.142 7966 | 1483 | 9.142 7966 | 9.142 7966 | 1483 | 30 |    |
|    | 40 | 9.142 9456 | 1482 | 9.142 9456 | 1482 | 9.142 9456 | 9.142 9456 | 1482 | 20 |    |
|    | 50 | 9.143 0946 | 1481 | 9.143 0946 | 1481 | 9.143 0946 | 9.143 0946 | 1481 | 10 |    |
| 3  | 0  | 9.143 2435 | 1480 | 9.143 2435 | 1480 | 9.143 2435 | 9.143 2435 | 1480 | 0  | 57 |
|    | 10 | 9.143 3933 | 1479 | 9.143 3933 | 1479 | 9.143 3933 | 9.143 3933 | 1479 | 50 |    |
|    | 20 | 9.143 5431 | 1478 | 9.143 5431 | 1478 | 9.143 5431 | 9.143 5431 | 1478 | 40 |    |
|    | 30 | 9.143 6929 | 1477 | 9.143 6929 | 1477 | 9.143 6929 | 9.143 6929 | 1477 | 30 |    |
|    | 40 | 9.143 8426 | 1476 | 9.143 8426 | 1476 | 9.143 8426 | 9.143 8426 | 1476 | 20 |    |
|    | 50 | 9.143 9924 | 1475 | 9.143 9924 | 1475 | 9.143 9924 | 9.143 9924 | 1475 | 10 |    |
| 4  | 0  | 9.144 1421 | 1474 | 9.144 1421 | 1474 | 9.144 1421 | 9.144 1421 | 1474 | 0  | 56 |
|    | 10 | 9.144 2914 | 1473 | 9.144 2914 | 1473 | 9.144 2914 | 9.144 2914 | 1473 | 50 |    |
|    | 20 | 9.144 4406 | 1472 | 9.144 4406 | 1472 | 9.144 4406 | 9.144 4406 | 1472 | 40 |    |
|    | 30 | 9.144 5898 | 1471 | 9.144 5898 | 1471 | 9.144 5898 | 9.144 5898 | 1471 | 30 |    |
|    | 40 | 9.144 7390 | 1470 | 9.144 7390 | 1470 | 9.144 7390 | 9.144 7390 | 1470 | 20 |    |
|    | 50 | 9.144 8882 | 1469 | 9.144 8882 | 1469 | 9.144 8882 | 9.144 8882 | 1469 | 10 |    |
| 5  | 0  | 9.145 0375 | 1468 | 9.145 0375 | 1468 | 9.145 0375 | 9.145 0375 | 1468 | 0  | 55 |
|    | 10 | 9.145 1867 | 1467 | 9.145 1867 | 1467 | 9.145 1867 | 9.145 1867 | 1467 | 50 |    |
|    | 20 | 9.145 3359 | 1466 | 9.145 3359 | 1466 | 9.145 3359 | 9.145 3359 | 1466 | 40 |    |
|    | 30 | 9.145 4851 | 1465 | 9.145 4851 | 1465 | 9.145 4851 | 9.145 4851 | 1465 | 30 |    |
|    | 40 | 9.145 6343 | 1464 | 9.145 6343 | 1464 | 9.145 6343 | 9.145 6343 | 1464 | 20 |    |
|    | 50 | 9.145 7835 | 1463 | 9.145 7835 | 1463 | 9.145 7835 | 9.145 7835 | 1463 | 10 |    |
| 6  | 0  | 9.145 9328 | 1462 | 9.145 9328 | 1462 | 9.145 9328 | 9.145 9328 | 1462 | 0  | 54 |
|    | 10 | 9.146 0820 | 1461 | 9.146 0820 | 1461 | 9.146 0820 | 9.146 0820 | 1461 | 50 |    |
|    | 20 | 9.146 2312 | 1460 | 9.146 2312 | 1460 | 9.146 2312 | 9.146 2312 | 1460 | 40 |    |
|    | 30 | 9.146 3804 | 1459 | 9.146 3804 | 1459 | 9.146 3804 | 9.146 3804 | 1459 | 30 |    |
|    | 40 | 9.146 5296 | 1458 | 9.146 5296 | 1458 | 9.146 5296 | 9.146 5296 | 1458 | 20 |    |
|    | 50 | 9.146 6788 | 1457 | 9.146 6788 | 1457 | 9.146 6788 | 9.146 6788 | 1457 | 10 |    |
| 7  | 0  | 9.146 8281 | 1456 | 9.146 8281 | 1456 | 9.146 8281 | 9.146 8281 | 1456 | 0  | 53 |
|    | 10 | 9.146 9773 | 1455 | 9.146 9773 | 1455 | 9.146 9773 | 9.146 9773 | 1455 | 50 |    |
|    | 20 | 9.147 1265 | 1454 | 9.147 1265 | 1454 | 9.147 1265 | 9.147 1265 | 1454 | 40 |    |
|    | 30 | 9.147 2757 | 1453 | 9.147 2757 | 1453 | 9.147 2757 | 9.147 2757 | 1453 | 30 |    |
|    | 40 | 9.147 4249 | 1452 | 9.147 4249 | 1452 | 9.147 4249 | 9.147 4249 | 1452 | 20 |    |
|    | 50 | 9.147 5741 | 1451 | 9.147 5741 | 1451 | 9.147 5741 | 9.147 5741 | 1451 | 10 |    |
| 8  | 0  | 9.147 7234 | 1450 | 9.147 7234 | 1450 | 9.147 7234 | 9.147 7234 | 1450 | 0  | 52 |
|    | 10 | 9.147 8726 | 1449 | 9.147 8726 | 1449 | 9.147 8726 | 9.147 8726 | 1449 | 50 |    |
|    | 20 | 9.148 0218 | 1448 | 9.148 0218 | 1448 | 9.148 0218 | 9.148 0218 | 1448 | 40 |    |
|    | 30 | 9.148 1710 | 1447 | 9.148 1710 | 1447 | 9.148 1710 | 9.148 1710 | 1447 | 30 |    |
|    | 40 | 9.148 3202 | 1446 | 9.148 3202 | 1446 | 9.148 3202 | 9.148 3202 | 1446 | 20 |    |
|    | 50 | 9.148 4694 | 1445 | 9.148 4694 | 1445 | 9.148 4694 | 9.148 4694 | 1445 | 10 |    |
| 9  | 0  | 9.148 6187 | 1444 | 9.148 6187 | 1444 | 9.148 6187 | 9.148 6187 | 1444 | 0  | 51 |
|    | 10 | 9.148 7679 | 1443 | 9.148 7679 | 1443 | 9.148 7679 | 9.148 7679 | 1443 | 50 |    |
|    | 20 | 9.148 9171 | 1442 | 9.148 9171 | 1442 | 9.148 9171 | 9.148 9171 | 1442 | 40 |    |
|    | 30 | 9.149 0663 | 1441 | 9.149 0663 | 1441 | 9.149 0663 | 9.149 0663 | 1441 | 30 |    |
|    | 40 | 9.149 2155 | 1440 | 9.149 2155 | 1440 | 9.149 2155 | 9.149 2155 | 1440 | 20 |    |
|    | 50 | 9.149 3647 | 1439 | 9.149 3647 | 1439 | 9.149 3647 | 9.149 3647 | 1439 | 10 |    |
| 10 | 0  | 9.149 5139 | 1438 | 9.149 5139 | 1438 | 9.149 5139 | 9.149 5139 | 1438 | 0  | 50 |
|    | 10 | 9.149 6631 | 1437 | 9.149 6631 | 1437 | 9.149 6631 | 9.149 6631 | 1437 | 50 |    |
|    | 20 | 9.149 8123 | 1436 | 9.149 8123 | 1436 | 9.149 8123 | 9.149 8123 | 1436 | 40 |    |
|    | 30 | 9.149 9615 | 1435 | 9.149 9615 | 1435 | 9.149 9615 | 9.149 9615 | 1435 | 30 |    |
|    | 40 | 9.150 1107 | 1434 | 9.150 1107 | 1434 | 9.150 1107 | 9.150 1107 | 1434 | 20 |    |
|    | 50 | 9.150 2599 | 1433 | 9.150 2599 | 1433 | 9.150 2599 | 9.150 2599 | 1433 | 10 |    |



|    | "  | Sin        | d.   | Tang       | d. c. | Cotg       | Cos        | d. | "  |        |
|----|----|------------|------|------------|-------|------------|------------|----|----|--------|
| 10 | 0  | 9.152 4507 | 1467 | 9.156 8773 | 1497  | 0.843 1227 | 9.995 5734 | 31 | 0  | 50     |
|    | 10 | 9.152 5974 | 1466 | 9.157 0270 | 1497  | 0.842 9730 | 9.995 5703 | 30 | 50 | 1500   |
|    | 20 | 9.152 7440 | 1466 | 9.157 1767 | 1496  | 0.842 8233 | 9.995 5673 | 30 | 40 | 1 159  |
|    | 30 | 9.152 8906 | 1465 | 9.157 3263 | 1496  | 0.842 6737 | 9.995 5643 | 30 | 30 | 2 300  |
|    | 40 | 9.153 0371 | 1465 | 9.157 4759 | 1495  | 0.842 5241 | 9.995 5613 | 30 | 20 | 3 450  |
|    | 50 | 9.153 1836 | 1465 | 9.157 6254 | 1494  | 0.842 3746 | 9.995 5582 | 30 | 10 | 4 600  |
| 11 | 0  | 9.153 3301 | 1463 | 9.157 7748 | 1495  | 0.842 2252 | 9.995 5552 | 30 | 0  | 5 750  |
|    | 10 | 9.153 4764 | 1464 | 9.157 9243 | 1493  | 0.842 0757 | 9.995 5522 | 31 | 50 | 6 900  |
|    | 20 | 9.153 6228 | 1463 | 9.158 0736 | 1494  | 0.841 9264 | 9.995 5491 | 30 | 40 | 7 1050 |
|    | 30 | 9.153 7691 | 1462 | 9.158 2230 | 1492  | 0.841 7770 | 9.995 5461 | 30 | 30 | 8 1200 |
|    | 40 | 9.153 9153 | 1462 | 9.158 3722 | 1492  | 0.841 6278 | 9.995 5431 | 30 | 20 | 9 1350 |
|    | 50 | 9.154 0615 | 1461 | 9.158 5214 | 1492  | 0.841 4786 | 9.995 5401 | 31 | 10 |        |
| 12 | 0  | 9.154 2076 | 1461 | 9.158 6706 | 1491  | 0.841 3294 | 9.995 5370 | 30 | 0  | 1490   |
|    | 10 | 9.154 3537 | 1461 | 9.158 8197 | 1491  | 0.841 1803 | 9.995 5340 | 31 | 50 | 1 149  |
|    | 20 | 9.154 4998 | 1459 | 9.158 9688 | 1490  | 0.841 0312 | 9.995 5309 | 30 | 40 | 2 298  |
|    | 30 | 9.154 6457 | 1460 | 9.159 1178 | 1490  | 0.840 8822 | 9.995 5279 | 30 | 30 | 3 447  |
|    | 40 | 9.154 7917 | 1459 | 9.159 2668 | 1489  | 0.840 7332 | 9.995 5249 | 30 | 20 | 4 596  |
|    | 50 | 9.154 9376 | 1458 | 9.159 4157 | 1489  | 0.840 5843 | 9.995 5218 | 31 | 10 | 5 745  |
| 13 | 0  | 9.155 0834 | 1458 | 9.159 5646 | 1488  | 0.840 4354 | 9.995 5188 | 30 | 0  | 6 891  |
|    | 10 | 9.155 2292 | 1457 | 9.159 7134 | 1488  | 0.840 2866 | 9.995 5158 | 31 | 50 | 7 1043 |
|    | 20 | 9.155 3749 | 1457 | 9.159 8622 | 1488  | 0.840 1378 | 9.995 5127 | 30 | 40 | 8 1192 |
|    | 30 | 9.155 5206 | 1457 | 9.160 0110 | 1486  | 0.839 9890 | 9.995 5097 | 30 | 30 | 9 1341 |
|    | 40 | 9.155 6663 | 1457 | 9.160 1596 | 1487  | 0.839 8404 | 9.995 5066 | 31 | 20 |        |
|    | 50 | 9.155 8118 | 1456 | 9.160 3083 | 1486  | 0.839 6917 | 9.995 5036 | 31 | 10 | 1480   |
| 14 | 0  | 9.155 9574 | 1455 | 9.160 4569 | 1485  | 0.839 5431 | 9.995 5005 | 30 | 0  | 1 148  |
|    | 10 | 9.156 1029 | 1454 | 9.160 6054 | 1485  | 0.839 3946 | 9.995 4975 | 31 | 50 | 2 296  |
|    | 20 | 9.156 2483 | 1454 | 9.160 7539 | 1484  | 0.839 2461 | 9.995 4944 | 30 | 40 | 3 441  |
|    | 30 | 9.156 3937 | 1454 | 9.160 9023 | 1484  | 0.839 0977 | 9.995 4914 | 31 | 30 | 4 592  |
|    | 40 | 9.156 5390 | 1453 | 9.161 0507 | 1483  | 0.838 9493 | 9.995 4883 | 30 | 20 | 5 740  |
|    | 50 | 9.156 6843 | 1453 | 9.161 1990 | 1483  | 0.838 8010 | 9.995 4853 | 31 | 10 | 6 888  |
| 15 | 0  | 9.156 8296 | 1452 | 9.161 3473 | 1483  | 0.838 6527 | 9.995 4822 | 30 | 0  | 7 1036 |
|    | 10 | 9.156 9748 | 1451 | 9.161 4956 | 1482  | 0.838 5044 | 9.995 4792 | 31 | 50 | 8 1184 |
|    | 20 | 9.157 1199 | 1451 | 9.161 6438 | 1481  | 0.838 3562 | 9.995 4761 | 30 | 40 | 9 1332 |
|    | 30 | 9.157 2650 | 1450 | 9.161 7919 | 1481  | 0.838 2081 | 9.995 4731 | 31 | 30 |        |
|    | 40 | 9.157 4100 | 1450 | 9.161 9400 | 1481  | 0.838 0600 | 9.995 4700 | 30 | 20 | 1470   |
|    | 50 | 9.157 5550 | 1450 | 9.162 0881 | 1480  | 0.837 9119 | 9.995 4670 | 31 | 10 | 1 147  |
| 16 | 0  | 9.157 7000 | 1449 | 9.162 2361 | 1479  | 0.837 7639 | 9.995 4639 | 30 | 0  | 2 294  |
|    | 10 | 9.157 8449 | 1448 | 9.162 3840 | 1479  | 0.837 6160 | 9.995 4608 | 31 | 50 | 3 441  |
|    | 20 | 9.157 9897 | 1448 | 9.162 5319 | 1479  | 0.837 4681 | 9.995 4578 | 30 | 40 | 4 592  |
|    | 30 | 9.158 1345 | 1447 | 9.162 6798 | 1478  | 0.837 3202 | 9.995 4547 | 31 | 30 | 5 740  |
|    | 40 | 9.158 2792 | 1447 | 9.162 8276 | 1478  | 0.837 1724 | 9.995 4517 | 30 | 20 | 6 888  |
|    | 50 | 9.158 4239 | 1447 | 9.162 9754 | 1477  | 0.837 0246 | 9.995 4486 | 31 | 10 | 7 1036 |
| 17 | 0  | 9.158 5686 | 1446 | 9.163 1231 | 1476  | 0.836 8769 | 9.995 4455 | 30 | 0  | 8 1184 |
|    | 10 | 9.158 7132 | 1445 | 9.163 2707 | 1476  | 0.836 7293 | 9.995 4425 | 31 | 50 | 9 1332 |
|    | 20 | 9.158 8577 | 1445 | 9.163 4183 | 1476  | 0.836 5817 | 9.995 4394 | 30 | 40 |        |
|    | 30 | 9.159 0022 | 1445 | 9.163 5659 | 1475  | 0.836 4341 | 9.995 4363 | 31 | 30 | 1450   |
|    | 40 | 9.159 1467 | 1444 | 9.163 7134 | 1475  | 0.836 2866 | 9.995 4333 | 30 | 20 | 1 145  |
|    | 50 | 9.159 2911 | 1443 | 9.163 8609 | 1474  | 0.836 1391 | 9.995 4302 | 31 | 10 | 2 290  |
| 18 | 0  | 9.159 4354 | 1443 | 9.164 0083 | 1474  | 0.835 9917 | 9.995 4271 | 30 | 0  | 3 435  |
|    | 10 | 9.159 5797 | 1443 | 9.164 1557 | 1473  | 0.835 8443 | 9.995 4240 | 31 | 50 | 4 580  |
|    | 20 | 9.159 7240 | 1442 | 9.164 3030 | 1473  | 0.835 6970 | 9.995 4210 | 30 | 40 | 5 725  |
|    | 30 | 9.159 8682 | 1442 | 9.164 4503 | 1472  | 0.835 5497 | 9.995 4179 | 31 | 30 | 6 870  |
|    | 40 | 9.160 0124 | 1441 | 9.164 5975 | 1472  | 0.835 4025 | 9.995 4148 | 30 | 20 | 7 1024 |
|    | 50 | 9.160 1565 | 1440 | 9.164 7447 | 1472  | 0.835 2553 | 9.995 4117 | 31 | 10 | 8 1168 |
| 19 | 0  | 9.160 3005 | 1440 | 9.164 8919 | 1471  | 0.835 1081 | 9.995 4087 | 30 | 0  | 9 1314 |
|    | 10 | 9.160 4445 | 1440 | 9.165 0390 | 1470  | 0.834 9610 | 9.995 4056 | 31 | 50 |        |
|    | 20 | 9.160 5885 | 1439 | 9.165 1860 | 1470  | 0.834 8140 | 9.995 4025 | 30 | 40 | 1440   |
|    | 30 | 9.160 7324 | 1439 | 9.165 3330 | 1469  | 0.834 6670 | 9.995 3994 | 31 | 30 | 1 144  |
|    | 40 | 9.160 8763 | 1438 | 9.165 4799 | 1469  | 0.834 5201 | 9.995 3963 | 30 | 20 | 2 288  |
|    | 50 | 9.161 0201 | 1438 | 9.165 6268 | 1469  | 0.834 3732 | 9.995 3933 | 31 | 10 | 3 432  |
| 20 | 0  | 9.161 1639 |      | 9.165 7737 |       | 0.834 2263 | 9.995 3902 | 30 | 0  | 4 576  |
|    |    |            |      |            |       |            |            |    |    | 5 720  |
|    |    |            |      |            |       |            |            |    |    | 6 864  |
|    |    |            |      |            |       |            |            |    |    | 7 1008 |
|    |    |            |      |            |       |            |            |    |    | 8 1152 |
|    |    |            |      |            |       |            |            |    |    | 9 1296 |
|    | "  | Cos        | d.   | Cotg       | d. c. | Tang       | Sin        | d. | "  |        |



|        |    |   | Sin        | d.   | Tang       | d. c. | Cotg       | Cos        | d. |    |    |
|--------|----|---|------------|------|------------|-------|------------|------------|----|----|----|
| 1470   | 20 | 0 | 9.161 1639 | 1437 | 9.165 7737 | 1468  | 0.834 2263 | 9.995 3902 | 31 | 0  | 40 |
| 1 147  | 10 | 0 | 9.161 3076 | 1437 | 9.165 9205 | 1467  | 0.834 0795 | 9.995 3871 | 31 | 50 |    |
| 2 294  | 20 | 0 | 9.161 4513 | 1436 | 9.166 0672 | 1467  | 0.833 9328 | 9.995 3840 | 31 | 40 |    |
| 3 441  | 30 | 0 | 9.161 5949 | 1435 | 9.166 2139 | 1467  | 0.833 7861 | 9.995 3809 | 31 | 30 |    |
| 4 588  | 40 | 0 | 9.161 7384 | 1430 | 9.166 3606 | 1466  | 0.833 6394 | 9.995 3778 | 31 | 20 |    |
| 5 735  | 50 | 0 | 9.161 8820 | 1434 | 9.166 5072 | 1466  | 0.833 4928 | 9.995 3747 | 31 | 10 |    |
| 6 882  |    |   |            |      |            |       |            |            | 30 |    |    |
| 7 1029 | 21 | 0 | 9.162 0254 | 1435 | 9.166 6538 | 1465  | 0.833 3462 | 9.995 3717 | 31 | 0  | 39 |
| 8 1176 | 10 | 0 | 9.162 1689 | 1434 | 9.166 8003 | 1465  | 0.833 1997 | 9.995 3686 | 31 | 50 |    |
| 9 1323 | 20 | 0 | 9.162 3123 | 1433 | 9.166 9468 | 1464  | 0.833 0532 | 9.995 3655 | 31 | 40 |    |
|        | 30 | 0 | 9.162 4556 | 1433 | 9.167 0932 | 1464  | 0.832 9068 | 9.995 3624 | 31 | 30 |    |
| 1480   | 40 | 0 | 9.162 5989 | 1432 | 9.167 2396 | 1463  | 0.832 7604 | 9.995 3593 | 31 | 20 |    |
| 1 146  | 50 | 0 | 9.162 7421 | 1432 | 9.167 3859 | 1463  | 0.832 6141 | 9.995 3562 | 31 | 10 |    |
| 2 292  |    |   |            |      |            |       |            |            | 31 | 0  | 38 |
| 3 438  | 22 | 0 | 9.162 8853 | 1431 | 9.167 5322 | 1462  | 0.832 4678 | 9.995 3531 | 31 | 50 |    |
| 4 584  | 10 | 0 | 9.163 0284 | 1431 | 9.167 6784 | 1462  | 0.832 3216 | 9.995 3500 | 31 | 40 |    |
| 5 730  | 20 | 0 | 9.163 1715 | 1431 | 9.167 8246 | 1462  | 0.832 1754 | 9.995 3469 | 31 | 30 |    |
| 6 876  | 30 | 0 | 9.163 3146 | 1429 | 9.167 9708 | 1460  | 0.832 0292 | 9.995 3438 | 31 | 20 |    |
| 7 1022 | 40 | 0 | 9.163 4575 | 1430 | 9.168 1168 | 1461  | 0.831 8832 | 9.995 3407 | 31 | 10 |    |
| 8 1168 | 50 | 0 | 9.163 6005 | 1429 | 9.168 2629 | 1460  | 0.831 7371 | 9.995 3376 | 31 | 0  | 37 |
| 9 1314 |    |   |            |      |            |       |            |            | 31 | 50 |    |
| 1490   | 23 | 0 | 9.163 7434 | 1428 | 9.168 4089 | 1459  | 0.831 5911 | 9.995 3345 | 31 | 40 |    |
| 1 145  | 10 | 0 | 9.163 8862 | 1428 | 9.168 5548 | 1459  | 0.831 4452 | 9.995 3314 | 31 | 30 |    |
| 2 290  | 20 | 0 | 9.164 0290 | 1428 | 9.168 7007 | 1459  | 0.831 2993 | 9.995 3283 | 31 | 20 |    |
| 3 435  | 30 | 0 | 9.164 1718 | 1427 | 9.168 8466 | 1458  | 0.831 1534 | 9.995 3252 | 31 | 10 |    |
| 4 580  | 40 | 0 | 9.164 3145 | 1427 | 9.168 9924 | 1458  | 0.831 0076 | 9.995 3221 | 31 | 0  | 36 |
| 5 725  | 50 | 0 | 9.164 4572 | 1426 | 9.169 1382 | 1457  | 0.830 8618 | 9.995 3190 | 31 | 50 |    |
| 6 870  |    |   |            |      |            |       |            |            | 31 | 40 |    |
| 7 1015 | 24 | 0 | 9.164 5998 | 1425 | 9.169 2839 | 1457  | 0.830 7161 | 9.995 3159 | 31 | 30 |    |
| 8 1160 | 10 | 0 | 9.164 7423 | 1425 | 9.169 4296 | 1456  | 0.830 5704 | 9.995 3128 | 31 | 20 |    |
| 9 1305 | 20 | 0 | 9.164 8848 | 1425 | 9.169 5752 | 1456  | 0.830 4248 | 9.995 3096 | 31 | 10 |    |
|        | 30 | 0 | 9.165 0273 | 1425 | 9.169 7208 | 1455  | 0.830 2792 | 9.995 3065 | 31 | 0  | 35 |
| 1440   | 40 | 0 | 9.165 1697 | 1424 | 9.169 8663 | 1455  | 0.830 1337 | 9.995 3034 | 31 | 50 |    |
| 1 144  | 50 | 0 | 9.165 3121 | 1423 | 9.170 0118 | 1454  | 0.829 9882 | 9.995 3003 | 31 | 40 |    |
| 2 288  |    |   |            |      |            |       |            |            | 31 | 30 |    |
| 3 432  | 25 | 0 | 9.165 4544 | 1423 | 9.170 1572 | 1454  | 0.829 8428 | 9.995 2972 | 31 | 20 |    |
| 4 576  | 10 | 0 | 9.165 5967 | 1422 | 9.170 3026 | 1454  | 0.829 6974 | 9.995 2941 | 31 | 10 |    |
| 5 720  | 20 | 0 | 9.165 7389 | 1422 | 9.170 4480 | 1453  | 0.829 5520 | 9.995 2910 | 31 | 0  | 34 |
| 6 864  | 30 | 0 | 9.165 8811 | 1421 | 9.170 5933 | 1452  | 0.829 4067 | 9.995 2878 | 31 | 50 |    |
| 7 1008 | 40 | 0 | 9.166 0232 | 1421 | 9.170 7385 | 1452  | 0.829 2615 | 9.995 2847 | 31 | 40 |    |
| 8 1152 | 50 | 0 | 9.166 1653 | 1421 | 9.170 8837 | 1452  | 0.829 1163 | 9.995 2816 | 31 | 30 |    |
| 9 1296 |    |   |            |      |            |       |            |            | 31 | 20 |    |
| 1430   | 26 | 0 | 9.166 3074 | 1419 | 9.171 0289 | 1451  | 0.828 9711 | 9.995 2785 | 31 | 10 |    |
| 1 143  | 10 | 0 | 9.166 4493 | 1420 | 9.171 1740 | 1451  | 0.828 8260 | 9.995 2754 | 31 | 0  | 33 |
| 2 286  | 20 | 0 | 9.166 5913 | 1419 | 9.171 3191 | 1450  | 0.828 6809 | 9.995 2722 | 31 | 50 |    |
| 3 429  | 30 | 0 | 9.166 7332 | 1418 | 9.171 4641 | 1449  | 0.828 5359 | 9.995 2691 | 31 | 40 |    |
| 4 572  | 40 | 0 | 9.166 8750 | 1418 | 9.171 6090 | 1449  | 0.828 3910 | 9.995 2660 | 31 | 30 |    |
| 5 715  | 50 | 0 | 9.167 0168 | 1418 | 9.171 7540 | 1449  | 0.828 2460 | 9.995 2629 | 31 | 20 |    |
| 6 858  |    |   |            |      |            |       |            |            | 31 | 10 |    |
| 7 1001 | 27 | 0 | 9.167 1586 | 1417 | 9.171 8989 | 1448  | 0.828 1011 | 9.995 2597 | 31 | 0  | 32 |
| 8 1144 | 10 | 0 | 9.167 3003 | 1416 | 9.172 0437 | 1448  | 0.827 9563 | 9.995 2566 | 31 | 50 |    |
| 9 1287 | 20 | 0 | 9.167 4419 | 1417 | 9.172 1885 | 1447  | 0.827 8115 | 9.995 2535 | 31 | 40 |    |
|        | 30 | 0 | 9.167 5836 | 1415 | 9.172 3332 | 1447  | 0.827 6668 | 9.995 2503 | 31 | 30 |    |
| 1420   | 40 | 0 | 9.167 7251 | 1415 | 9.172 4779 | 1447  | 0.827 5221 | 9.995 2472 | 31 | 20 |    |
| 1 142  | 50 | 0 | 9.167 8666 | 1415 | 9.172 6226 | 1446  | 0.827 3774 | 9.995 2441 | 31 | 10 |    |
| 2 284  |    |   |            |      |            |       |            |            | 31 | 0  | 31 |
| 3 426  | 28 | 0 | 9.168 0081 | 1414 | 9.172 7672 | 1445  | 0.827 2328 | 9.995 2409 | 31 | 50 |    |
| 4 568  | 10 | 0 | 9.168 1495 | 1414 | 9.172 9117 | 1445  | 0.827 0883 | 9.995 2378 | 31 | 40 |    |
| 5 710  | 20 | 0 | 9.168 2909 | 1413 | 9.173 0562 | 1445  | 0.826 9438 | 9.995 2347 | 31 | 30 |    |
| 6 852  | 30 | 0 | 9.168 4322 | 1413 | 9.173 2007 | 1444  | 0.826 7993 | 9.995 2315 | 31 | 20 |    |
| 7 994  | 40 | 0 | 9.168 5735 | 1413 | 9.173 3451 | 1444  | 0.826 6549 | 9.995 2284 | 31 | 10 |    |
| 8 1136 | 50 | 0 | 9.168 7148 | 1411 | 9.173 4895 | 1443  | 0.826 5105 | 9.995 2253 | 31 | 0  | 30 |
| 9 1278 |    |   |            |      |            |       |            |            | 31 | 50 |    |
| 1410   | 29 | 0 | 9.168 8559 | 1412 | 9.173 6338 | 1443  | 0.826 3662 | 9.995 2221 | 31 | 40 |    |
| 1 141  | 10 | 0 | 9.168 9971 | 1411 | 9.173 7781 | 1442  | 0.826 2219 | 9.995 2190 | 31 | 30 |    |
| 2 282  | 20 | 0 | 9.169 1382 | 1410 | 9.173 9223 | 1442  | 0.826 0777 | 9.995 2158 | 31 | 20 |    |
| 3 423  | 30 | 0 | 9.169 2792 | 1410 | 9.174 0665 | 1442  | 0.825 9335 | 9.995 2127 | 31 | 10 |    |
| 4 564  | 40 | 0 | 9.169 4202 | 1410 | 9.174 2107 | 1441  | 0.825 7893 | 9.995 2095 | 31 | 0  | 29 |
| 5 705  | 50 | 0 | 9.169 5612 | 1409 | 9.174 3548 | 1440  | 0.825 6452 | 9.995 2064 | 31 | 50 |    |
| 6 846  |    |   |            |      |            |       |            |            | 31 | 40 |    |
| 7 987  | 80 | 0 | 9.169 7021 |      | 9.174 4988 |       | 0.825 5012 | 9.995 2033 | 31 | 30 |    |
| 8 1128 |    |   |            |      |            |       |            |            | 31 | 20 |    |
| 9 1269 |    |   |            |      |            |       |            |            | 31 | 10 | 80 |
|        |    |   | Cos        | d.   | Cotg       | d. c. | Tang       | Sin        | d. |    |    |



|    | "  | Sin        | d.   | Tang       | d. c. | Cotg       | Cos        | d. | "  |    |
|----|----|------------|------|------------|-------|------------|------------|----|----|----|
| 30 | 0  | 9.169 7021 | 1408 | 9.174 4988 | 1440  | 0.825 5012 | 9.995 2033 | 32 | 0  | 30 |
|    | 10 | 9.169 8429 | 1409 | 9.174 6428 | 1440  | 0.825 3572 | 9.995 2001 | 31 | 50 |    |
|    | 20 | 9.169 9838 | 1407 | 9.174 7868 | 1439  | 0.825 2132 | 9.995 1970 | 32 | 40 |    |
|    | 30 | 9.170 1245 | 1407 | 9.174 9307 | 1439  | 0.825 0693 | 9.995 1938 | 31 | 30 |    |
|    | 40 | 9.170 2652 | 1407 | 9.175 0746 | 1438  | 0.824 9254 | 9.995 1907 | 32 | 20 |    |
|    | 50 | 9.170 4059 | 1406 | 9.175 2184 | 1438  | 0.824 7816 | 9.995 1875 | 31 | 10 |    |
| 31 | 0  | 9.170 5465 | 1406 | 9.175 3622 | 1437  | 0.824 6378 | 9.995 1844 | 32 | 0  | 29 |
|    | 10 | 9.170 6871 | 1406 | 9.175 5059 | 1437  | 0.824 4941 | 9.995 1812 | 31 | 50 |    |
|    | 20 | 9.170 8277 | 1405 | 9.175 6496 | 1437  | 0.824 3504 | 9.995 1781 | 32 | 40 |    |
|    | 30 | 9.170 9682 | 1404 | 9.175 7933 | 1436  | 0.824 2067 | 9.995 1749 | 32 | 30 |    |
|    | 40 | 9.171 1086 | 1404 | 9.175 9369 | 1435  | 0.824 0631 | 9.995 1717 | 31 | 20 |    |
|    | 50 | 9.171 2490 | 1403 | 9.176 0804 | 1435  | 0.823 9196 | 9.995 1686 | 32 | 10 |    |
| 32 | 0  | 9.171 3893 | 1403 | 9.176 2239 | 1435  | 0.823 7761 | 9.995 1654 | 31 | 0  | 28 |
|    | 10 | 9.171 5296 | 1403 | 9.176 3674 | 1434  | 0.823 6326 | 9.995 1623 | 32 | 50 |    |
|    | 20 | 9.171 6699 | 1402 | 9.176 5108 | 1434  | 0.823 4892 | 9.995 1591 | 32 | 40 |    |
|    | 30 | 9.171 8101 | 1402 | 9.176 6542 | 1433  | 0.823 3458 | 9.995 1559 | 31 | 30 |    |
|    | 40 | 9.171 9503 | 1401 | 9.176 7975 | 1433  | 0.823 2025 | 9.995 1528 | 32 | 20 |    |
|    | 50 | 9.172 0904 | 1401 | 9.176 9408 | 1432  | 0.823 0592 | 9.995 1496 | 32 | 10 |    |
| 33 | 0  | 9.172 2305 | 1400 | 9.177 0840 | 1432  | 0.822 9160 | 9.995 1464 | 31 | 0  | 27 |
|    | 10 | 9.172 3705 | 1400 | 9.177 2272 | 1431  | 0.822 7728 | 9.995 1433 | 32 | 50 |    |
|    | 20 | 9.172 5105 | 1399 | 9.177 3703 | 1431  | 0.822 6297 | 9.995 1401 | 32 | 40 |    |
|    | 30 | 9.172 6504 | 1399 | 9.177 5134 | 1431  | 0.822 4866 | 9.995 1369 | 31 | 30 |    |
|    | 40 | 9.172 7903 | 1398 | 9.177 6565 | 1430  | 0.822 3435 | 9.995 1338 | 32 | 20 |    |
|    | 50 | 9.172 9301 | 1398 | 9.177 7995 | 1430  | 0.822 2005 | 9.995 1306 | 32 | 10 |    |
| 34 | 0  | 9.173 0699 | 1398 | 9.177 9425 | 1429  | 0.822 0575 | 9.995 1274 | 31 | 0  | 26 |
|    | 10 | 9.173 2097 | 1397 | 9.178 0854 | 1429  | 0.821 9146 | 9.995 1243 | 32 | 50 |    |
|    | 20 | 9.173 3494 | 1396 | 9.178 2283 | 1428  | 0.821 7717 | 9.995 1211 | 32 | 40 |    |
|    | 30 | 9.173 4890 | 1396 | 9.178 3711 | 1428  | 0.821 6289 | 9.995 1179 | 32 | 30 |    |
|    | 40 | 9.173 6286 | 1396 | 9.178 5139 | 1427  | 0.821 4861 | 9.995 1147 | 31 | 20 |    |
|    | 50 | 9.173 7682 | 1395 | 9.178 6566 | 1427  | 0.821 3434 | 9.995 1116 | 32 | 10 |    |
| 35 | 0  | 9.173 9077 | 1395 | 9.178 7993 | 1427  | 0.821 2007 | 9.995 1084 | 32 | 0  | 25 |
|    | 10 | 9.174 0472 | 1394 | 9.178 9420 | 1426  | 0.821 0580 | 9.995 1052 | 32 | 50 |    |
|    | 20 | 9.174 1866 | 1394 | 9.179 0846 | 1425  | 0.820 9154 | 9.995 1020 | 32 | 40 |    |
|    | 30 | 9.174 3260 | 1393 | 9.179 2271 | 1426  | 0.820 7729 | 9.995 0988 | 31 | 30 |    |
|    | 40 | 9.174 4653 | 1393 | 9.179 3697 | 1424  | 0.820 6303 | 9.995 0957 | 32 | 20 |    |
|    | 50 | 9.174 6046 | 1393 | 9.179 5121 | 1425  | 0.820 4879 | 9.995 0925 | 32 | 10 |    |
| 36 | 0  | 9.174 7439 | 1392 | 9.179 6546 | 1423  | 0.820 3454 | 9.995 0893 | 32 | 0  | 24 |
|    | 10 | 9.174 8831 | 1391 | 9.179 7969 | 1424  | 0.820 2031 | 9.995 0861 | 32 | 50 |    |
|    | 20 | 9.175 0222 | 1391 | 9.179 9393 | 1423  | 0.820 0607 | 9.995 0829 | 32 | 40 |    |
|    | 30 | 9.175 1613 | 1391 | 9.180 0816 | 1422  | 0.819 9184 | 9.995 0797 | 31 | 30 |    |
|    | 40 | 9.175 3004 | 1390 | 9.180 2238 | 1422  | 0.819 7762 | 9.995 0766 | 32 | 20 |    |
|    | 50 | 9.175 4394 | 1390 | 9.180 3660 | 1422  | 0.819 6340 | 9.995 0734 | 32 | 10 |    |
| 37 | 0  | 9.175 5784 | 1389 | 9.180 5082 | 1421  | 0.819 4918 | 9.995 0702 | 32 | 0  | 23 |
|    | 10 | 9.175 7173 | 1389 | 9.180 6503 | 1421  | 0.819 3497 | 9.995 0670 | 32 | 50 |    |
|    | 20 | 9.175 8562 | 1388 | 9.180 7924 | 1420  | 0.819 2076 | 9.995 0638 | 32 | 40 |    |
|    | 30 | 9.175 9950 | 1388 | 9.180 9344 | 1420  | 0.819 0656 | 9.995 0606 | 32 | 30 |    |
|    | 40 | 9.176 1338 | 1387 | 9.181 0764 | 1419  | 0.818 9236 | 9.995 0574 | 32 | 20 |    |
|    | 50 | 9.176 2725 | 1387 | 9.181 2183 | 1419  | 0.818 7817 | 9.995 0542 | 32 | 10 |    |
| 38 | 0  | 9.176 4112 | 1387 | 9.181 3602 | 1419  | 0.818 6398 | 9.995 0510 | 32 | 0  | 22 |
|    | 10 | 9.176 5499 | 1386 | 9.181 5021 | 1418  | 0.818 4979 | 9.995 0478 | 32 | 50 |    |
|    | 20 | 9.176 6885 | 1385 | 9.181 6439 | 1417  | 0.818 3561 | 9.995 0446 | 32 | 40 |    |
|    | 30 | 9.176 8270 | 1386 | 9.181 7856 | 1417  | 0.818 2144 | 9.995 0414 | 32 | 30 |    |
|    | 40 | 9.176 9656 | 1384 | 9.181 9273 | 1417  | 0.818 0727 | 9.995 0382 | 32 | 20 |    |
|    | 50 | 9.177 1040 | 1385 | 9.182 0690 | 1416  | 0.817 9310 | 9.995 0350 | 32 | 10 |    |
| 39 | 0  | 9.177 2425 | 1383 | 9.182 2106 | 1416  | 0.817 7894 | 9.995 0318 | 32 | 0  | 21 |
|    | 10 | 9.177 3808 | 1384 | 9.182 3522 | 1416  | 0.817 6478 | 9.995 0286 | 32 | 50 |    |
|    | 20 | 9.177 5192 | 1383 | 9.182 4938 | 1415  | 0.817 5062 | 9.995 0254 | 32 | 40 |    |
|    | 30 | 9.177 6575 | 1382 | 9.182 6353 | 1414  | 0.817 3647 | 9.995 0222 | 32 | 30 |    |
|    | 40 | 9.177 7957 | 1382 | 9.182 7767 | 1414  | 0.817 2233 | 9.995 0190 | 32 | 20 |    |
|    | 50 | 9.177 9339 | 1382 | 9.182 9181 | 1414  | 0.817 0819 | 9.995 0158 | 32 | 10 |    |
| 40 | 0  | 9.178 0721 | 1382 | 9.183 0595 | 1414  | 0.816 9405 | 9.995 0126 | 32 | 0  | 20 |
|    |    | Cos        | d.   | Cotg       | d. c. | Tang       | Sin        | d. | "  |    |







|    |    | Sin        | d.   | Tang       | d. c. | Cotg       | Cos        | d. |    |    |
|----|----|------------|------|------------|-------|------------|------------|----|----|----|
| 50 | 0  | 9.186 2802 | 1355 | 9.191 4621 | 1387  | 0.808 5379 | 9.994 8181 | 32 | 0  | 10 |
|    | 10 | 9.186 4157 | 1354 | 9.191 6008 | 1387  | 0.808 3992 | 9.994 8149 | 33 | 50 |    |
|    | 20 | 9.186 5511 | 1354 | 9.191 7395 | 1386  | 0.808 2605 | 9.994 8116 | 33 | 40 |    |
|    | 30 | 9.186 6865 | 1353 | 9.191 8781 | 1387  | 0.808 1219 | 9.994 8083 | 33 | 30 |    |
|    | 40 | 9.186 8218 | 1353 | 9.192 0168 | 1385  | 0.807 9832 | 9.994 8050 | 33 | 20 |    |
|    | 50 | 9.186 9571 | 1352 | 9.192 1553 | 1386  | 0.807 8447 | 9.994 8018 | 33 | 10 |    |
| 51 | 0  | 9.187 0923 | 1352 | 9.192 2939 | 1384  | 0.807 7061 | 9.994 7985 | 33 | 0  | 9  |
|    | 10 | 9.187 2275 | 1352 | 9.192 4323 | 1385  | 0.807 5677 | 9.994 7952 | 33 | 50 |    |
|    | 20 | 9.187 3627 | 1351 | 9.192 5708 | 1384  | 0.807 4292 | 9.994 7919 | 33 | 40 |    |
|    | 30 | 9.187 4978 | 1351 | 9.192 7092 | 1383  | 0.807 2908 | 9.994 7886 | 33 | 30 |    |
|    | 40 | 9.187 6329 | 1350 | 9.192 8475 | 1384  | 0.807 1525 | 9.994 7854 | 33 | 20 |    |
|    | 50 | 9.187 7679 | 1350 | 9.192 9859 | 1382  | 0.807 0141 | 9.994 7821 | 33 | 10 |    |
| 52 | 0  | 9.187 9029 | 1350 | 9.193 1241 | 1383  | 0.806 8759 | 9.994 7788 | 33 | 0  | 8  |
|    | 10 | 9.188 0379 | 1349 | 9.193 2624 | 1382  | 0.806 7376 | 9.994 7755 | 33 | 50 |    |
|    | 20 | 9.188 1728 | 1348 | 9.193 4006 | 1381  | 0.806 5994 | 9.994 7722 | 33 | 40 |    |
|    | 30 | 9.188 3076 | 1348 | 9.193 5387 | 1381  | 0.806 4613 | 9.994 7689 | 33 | 30 |    |
|    | 40 | 9.188 4425 | 1347 | 9.193 6768 | 1381  | 0.806 3232 | 9.994 7656 | 33 | 20 |    |
|    | 50 | 9.188 5772 | 1348 | 9.193 8149 | 1380  | 0.806 1851 | 9.994 7624 | 33 | 10 |    |
| 53 | 0  | 9.188 7120 | 1347 | 9.193 9529 | 1380  | 0.806 0471 | 9.994 7591 | 33 | 0  | 7  |
|    | 10 | 9.188 8467 | 1346 | 9.194 0909 | 1379  | 0.805 9091 | 9.994 7558 | 33 | 50 |    |
|    | 20 | 9.188 9813 | 1346 | 9.194 2288 | 1379  | 0.805 7712 | 9.994 7525 | 33 | 40 |    |
|    | 30 | 9.189 1159 | 1346 | 9.194 3667 | 1379  | 0.805 6333 | 9.994 7492 | 33 | 30 |    |
|    | 40 | 9.189 2505 | 1345 | 9.194 5046 | 1378  | 0.805 4954 | 9.994 7459 | 33 | 20 |    |
|    | 50 | 9.189 3850 | 1345 | 9.194 6424 | 1378  | 0.805 3576 | 9.994 7426 | 33 | 10 |    |
| 54 | 0  | 9.189 5195 | 1344 | 9.194 7802 | 1377  | 0.805 2198 | 9.994 7393 | 33 | 0  | 6  |
|    | 10 | 9.189 6539 | 1344 | 9.194 9179 | 1377  | 0.805 0821 | 9.994 7360 | 33 | 50 |    |
|    | 20 | 9.189 7883 | 1343 | 9.195 0556 | 1376  | 0.804 9444 | 9.994 7327 | 33 | 40 |    |
|    | 30 | 9.189 9226 | 1344 | 9.195 1932 | 1376  | 0.804 8068 | 9.994 7294 | 33 | 30 |    |
|    | 40 | 9.190 0570 | 1342 | 9.195 3308 | 1376  | 0.804 6692 | 9.994 7261 | 33 | 20 |    |
|    | 50 | 9.190 1912 | 1342 | 9.195 4684 | 1375  | 0.804 5316 | 9.994 7228 | 33 | 10 |    |
| 55 | 0  | 9.190 3254 | 1342 | 9.195 6059 | 1375  | 0.804 3941 | 9.994 7195 | 33 | 0  | 5  |
|    | 10 | 9.190 4596 | 1342 | 9.195 7434 | 1375  | 0.804 2566 | 9.994 7162 | 33 | 50 |    |
|    | 20 | 9.190 5938 | 1340 | 9.195 8809 | 1374  | 0.804 1191 | 9.994 7129 | 33 | 40 |    |
|    | 30 | 9.190 7278 | 1341 | 9.196 0183 | 1373  | 0.803 9817 | 9.994 7096 | 33 | 30 |    |
|    | 40 | 9.190 8619 | 1340 | 9.196 1556 | 1373  | 0.803 8444 | 9.994 7063 | 33 | 20 |    |
|    | 50 | 9.190 9959 | 1340 | 9.196 2929 | 1373  | 0.803 7071 | 9.994 7030 | 33 | 10 |    |
| 56 | 0  | 9.191 1299 | 1339 | 9.196 4302 | 1372  | 0.803 5698 | 9.994 6997 | 33 | 0  | 4  |
|    | 10 | 9.191 2638 | 1339 | 9.196 5674 | 1372  | 0.803 4326 | 9.994 6964 | 34 | 50 |    |
|    | 20 | 9.191 3977 | 1338 | 9.196 7046 | 1372  | 0.803 2954 | 9.994 6930 | 33 | 40 |    |
|    | 30 | 9.191 5315 | 1338 | 9.196 8418 | 1371  | 0.803 1582 | 9.994 6897 | 33 | 30 |    |
|    | 40 | 9.191 6653 | 1338 | 9.196 9789 | 1371  | 0.803 0211 | 9.994 6864 | 33 | 20 |    |
|    | 50 | 9.191 7991 | 1337 | 9.197 1160 | 1371  | 0.802 8840 | 9.994 6831 | 33 | 10 |    |
| 57 | 0  | 9.191 9328 | 1337 | 9.197 2530 | 1370  | 0.802 7470 | 9.994 6798 | 33 | 0  | 3  |
|    | 10 | 9.192 0665 | 1336 | 9.197 3900 | 1369  | 0.802 6100 | 9.994 6765 | 33 | 50 |    |
|    | 20 | 9.192 2001 | 1336 | 9.197 5269 | 1369  | 0.802 4731 | 9.994 6732 | 33 | 40 |    |
|    | 30 | 9.192 3337 | 1335 | 9.197 6638 | 1369  | 0.802 3362 | 9.994 6699 | 33 | 30 |    |
|    | 40 | 9.192 4672 | 1335 | 9.197 8007 | 1368  | 0.802 1993 | 9.994 6665 | 33 | 20 |    |
|    | 50 | 9.192 6007 | 1335 | 9.197 9375 | 1368  | 0.802 0625 | 9.994 6632 | 33 | 10 |    |
| 58 | 0  | 9.192 7342 | 1334 | 9.198 0743 | 1368  | 0.801 9257 | 9.994 6599 | 34 | 0  | 2  |
|    | 10 | 9.192 8676 | 1334 | 9.198 2111 | 1367  | 0.801 7889 | 9.994 6565 | 33 | 50 |    |
|    | 20 | 9.193 0010 | 1333 | 9.198 3478 | 1366  | 0.801 6522 | 9.994 6532 | 33 | 40 |    |
|    | 30 | 9.193 1343 | 1333 | 9.198 4844 | 1366  | 0.801 5156 | 9.994 6499 | 33 | 30 |    |
|    | 40 | 9.193 2676 | 1333 | 9.198 6210 | 1366  | 0.801 3790 | 9.994 6466 | 33 | 20 |    |
|    | 50 | 9.193 4009 | 1332 | 9.198 7576 | 1365  | 0.801 2424 | 9.994 6432 | 33 | 10 |    |
| 59 | 0  | 9.193 5341 | 1331 | 9.198 8941 | 1365  | 0.801 1059 | 9.994 6399 | 33 | 0  | 1  |
|    | 10 | 9.193 6672 | 1332 | 9.199 0306 | 1365  | 0.800 9694 | 9.994 6366 | 33 | 50 |    |
|    | 20 | 9.193 8004 | 1331 | 9.199 1671 | 1364  | 0.800 8329 | 9.994 6333 | 33 | 40 |    |
|    | 30 | 9.193 9334 | 1331 | 9.199 3035 | 1364  | 0.800 6965 | 9.994 6299 | 33 | 30 |    |
|    | 40 | 9.194 0665 | 1330 | 9.199 4399 | 1363  | 0.800 5601 | 9.994 6266 | 33 | 20 |    |
|    | 50 | 9.194 1995 | 1329 | 9.199 5762 | 1363  | 0.800 4238 | 9.994 6233 | 33 | 10 |    |
| 60 | 0  | 9.194 3324 |      | 9.199 7125 |       | 0.800 2875 | 9.994 6199 | 34 | 0  | 0  |
|    |    | Cos        | d.   | Cotg       | d. c. | Tang       | Sin        | d. |    |    |



80<sup>9</sup>







1820

1 132  
2 264  
3 396  
4 528  
5 660  
6 792  
7 924  
8 1056  
9 1188

1310

1 131  
2 262  
3 393  
4 524  
5 655  
6 786  
7 917  
8 1048  
9 1179

1300

1 130  
2 260  
3 390  
4 520  
5 650  
6 780  
7 910  
8 1040  
9 1170

1290

1 129  
2 258  
3 387  
4 516  
5 645  
6 774  
7 903  
8 1032  
9 1161

1280

1 128  
2 256  
3 384  
4 512  
5 640  
6 768  
7 896  
8 1024  
9 1152

1270

1 127  
2 254  
3 381  
4 508  
5 635  
6 761  
7 889  
8 1016  
9 1143

1260

1 126  
2 252  
3 378  
4 504  
5 630  
6 756  
7 882  
8 1008  
9 1134

|    |    | sin        | d.   | Tang       | d. c. | Cotg       | Cos        | d. |    |    |
|----|----|------------|------|------------|-------|------------|------------|----|----|----|
| 20 | 0  | 9.209 9917 | 1281 | 9.215 7795 | 1316  | 0.784 2205 | 9.994 2122 | 35 | 0  | 40 |
|    | 10 | 9.210 1198 | 1281 | 9.215 9111 | 1315  | 0.784 0889 | 9.994 2087 | 34 | 50 |    |
|    | 20 | 9.210 2479 | 1280 | 9.216 0426 | 1315  | 0.783 9574 | 9.994 2053 | 35 | 40 |    |
|    | 30 | 9.210 3759 | 1280 | 9.216 1741 | 1314  | 0.783 8259 | 9.994 2018 | 35 | 30 |    |
|    | 40 | 9.210 5039 | 1279 | 9.216 3055 | 1314  | 0.783 6945 | 9.994 1984 | 34 | 20 |    |
|    | 50 | 9.210 6318 | 1279 | 9.216 4369 | 1314  | 0.783 5631 | 9.994 1949 | 35 | 10 |    |
| 21 | 0  | 9.210 7597 | 1278 | 9.216 5683 | 1313  | 0.783 4317 | 9.994 1914 | 34 | 0  | 39 |
|    | 10 | 9.210 8875 | 1279 | 9.216 6996 | 1313  | 0.783 3004 | 9.994 1880 | 35 | 50 |    |
|    | 20 | 9.211 0154 | 1277 | 9.216 8309 | 1312  | 0.783 1691 | 9.994 1845 | 35 | 40 |    |
|    | 30 | 9.211 1431 | 1278 | 9.216 9621 | 1312  | 0.783 0379 | 9.994 1810 | 34 | 30 |    |
|    | 40 | 9.211 2709 | 1277 | 9.217 0933 | 1312  | 0.782 9067 | 9.994 1776 | 35 | 20 |    |
|    | 50 | 9.211 3986 | 1277 | 9.217 2245 | 1311  | 0.782 7755 | 9.994 1741 | 35 | 10 |    |
| 22 | 0  | 9.211 5263 | 1276 | 9.217 3556 | 1311  | 0.782 6444 | 9.994 1706 | 35 | 0  | 38 |
|    | 10 | 9.211 6539 | 1276 | 9.217 4867 | 1311  | 0.782 5133 | 9.994 1671 | 34 | 50 |    |
|    | 20 | 9.211 7815 | 1275 | 9.217 6178 | 1310  | 0.782 3822 | 9.994 1637 | 35 | 40 |    |
|    | 30 | 9.211 9090 | 1275 | 9.217 7488 | 1310  | 0.782 2512 | 9.994 1602 | 35 | 30 |    |
|    | 40 | 9.212 0365 | 1275 | 9.217 8798 | 1310  | 0.782 1202 | 9.994 1567 | 35 | 20 |    |
|    | 50 | 9.212 1640 | 1274 | 9.218 0108 | 1309  | 0.781 9892 | 9.994 1532 | 34 | 10 |    |
| 23 | 0  | 9.212 2914 | 1274 | 9.218 1417 | 1309  | 0.781 8583 | 9.994 1498 | 35 | 0  | 37 |
|    | 10 | 9.212 4188 | 1274 | 9.218 2726 | 1308  | 0.781 7274 | 9.994 1463 | 35 | 50 |    |
|    | 20 | 9.212 5462 | 1273 | 9.218 4034 | 1308  | 0.781 5966 | 9.994 1428 | 35 | 40 |    |
|    | 30 | 9.212 6735 | 1273 | 9.218 5342 | 1308  | 0.781 4658 | 9.994 1393 | 35 | 30 |    |
|    | 40 | 9.212 8008 | 1272 | 9.218 6650 | 1307  | 0.781 3350 | 9.994 1358 | 35 | 20 |    |
|    | 50 | 9.212 9280 | 1272 | 9.218 7957 | 1307  | 0.781 2043 | 9.994 1323 | 34 | 10 |    |
| 24 | 0  | 9.213 0552 | 1272 | 9.218 9264 | 1306  | 0.781 0736 | 9.994 1289 | 35 | 0  | 36 |
|    | 10 | 9.213 1824 | 1271 | 9.219 0570 | 1306  | 0.780 9430 | 9.994 1254 | 35 | 50 |    |
|    | 20 | 9.213 3095 | 1271 | 9.219 1876 | 1306  | 0.780 8124 | 9.994 1219 | 35 | 40 |    |
|    | 30 | 9.213 4366 | 1271 | 9.219 3182 | 1306  | 0.780 6818 | 9.994 1184 | 35 | 30 |    |
|    | 40 | 9.213 5637 | 1270 | 9.219 4488 | 1305  | 0.780 5512 | 9.994 1149 | 35 | 20 |    |
|    | 50 | 9.213 6907 | 1269 | 9.219 5793 | 1304  | 0.780 4207 | 9.994 1114 | 35 | 10 |    |
| 25 | 0  | 9.213 8176 | 1270 | 9.219 7097 | 1304  | 0.780 2903 | 9.994 1079 | 35 | 0  | 35 |
|    | 10 | 9.213 9446 | 1269 | 9.219 8401 | 1304  | 0.780 1599 | 9.994 1044 | 35 | 50 |    |
|    | 20 | 9.214 0715 | 1268 | 9.219 9705 | 1304  | 0.780 0295 | 9.994 1009 | 35 | 40 |    |
|    | 30 | 9.214 1983 | 1269 | 9.220 1009 | 1303  | 0.779 8991 | 9.994 0974 | 35 | 30 |    |
|    | 40 | 9.214 3252 | 1267 | 9.220 2312 | 1303  | 0.779 7688 | 9.994 0939 | 34 | 20 |    |
|    | 50 | 9.214 4519 | 1268 | 9.220 3615 | 1302  | 0.779 6385 | 9.994 0905 | 35 | 10 |    |
| 26 | 0  | 9.214 5787 | 1267 | 9.220 4917 | 1302  | 0.779 5083 | 9.994 0870 | 35 | 0  | 34 |
|    | 10 | 9.214 7054 | 1267 | 9.220 6219 | 1302  | 0.779 3781 | 9.994 0835 | 35 | 50 |    |
|    | 20 | 9.214 8321 | 1266 | 9.220 7521 | 1301  | 0.779 2479 | 9.994 0800 | 35 | 40 |    |
|    | 30 | 9.214 9587 | 1266 | 9.220 8822 | 1301  | 0.779 1178 | 9.994 0765 | 35 | 30 |    |
|    | 40 | 9.215 0853 | 1265 | 9.221 0123 | 1301  | 0.778 9877 | 9.994 0730 | 36 | 20 |    |
|    | 50 | 9.215 2118 | 1266 | 9.221 1424 | 1300  | 0.778 8576 | 9.994 0694 | 35 | 10 |    |
| 27 | 0  | 9.215 3384 | 1264 | 9.221 2724 | 1300  | 0.778 7276 | 9.994 0659 | 35 | 0  | 33 |
|    | 10 | 9.215 4648 | 1265 | 9.221 4024 | 1300  | 0.778 5976 | 9.994 0624 | 35 | 50 |    |
|    | 20 | 9.215 5913 | 1264 | 9.221 5324 | 1299  | 0.778 4676 | 9.994 0589 | 35 | 40 |    |
|    | 30 | 9.215 7177 | 1264 | 9.221 6623 | 1298  | 0.778 3377 | 9.994 0554 | 35 | 30 |    |
|    | 40 | 9.215 8441 | 1263 | 9.221 7921 | 1299  | 0.778 2079 | 9.994 0519 | 35 | 20 |    |
|    | 50 | 9.215 9704 | 1263 | 9.221 9220 | 1298  | 0.778 0780 | 9.994 0484 | 35 | 10 |    |
| 28 | 0  | 9.216 0967 | 1262 | 9.222 0518 | 1297  | 0.777 9482 | 9.994 0449 | 35 | 0  | 32 |
|    | 10 | 9.216 2229 | 1262 | 9.222 1815 | 1298  | 0.777 8185 | 9.994 0414 | 35 | 50 |    |
|    | 20 | 9.216 3491 | 1262 | 9.222 3113 | 1297  | 0.777 6887 | 9.994 0379 | 35 | 40 |    |
|    | 30 | 9.216 4753 | 1262 | 9.222 4410 | 1296  | 0.777 5590 | 9.994 0344 | 36 | 30 |    |
|    | 40 | 9.216 6015 | 1261 | 9.222 5706 | 1296  | 0.777 4294 | 9.994 0308 | 35 | 20 |    |
|    | 50 | 9.216 7276 | 1260 | 9.222 7002 | 1296  | 0.777 2998 | 9.994 0273 | 35 | 10 |    |
| 29 | 0  | 9.216 8536 | 1261 | 9.222 8298 | 1296  | 0.777 1702 | 9.994 0238 | 35 | 0  | 31 |
|    | 10 | 9.216 9797 | 1259 | 9.222 9594 | 1295  | 0.777 0406 | 9.994 0203 | 35 | 50 |    |
|    | 20 | 9.217 1056 | 1260 | 9.223 0889 | 1294  | 0.776 9111 | 9.994 0168 | 35 | 40 |    |
|    | 30 | 9.217 2316 | 1259 | 9.223 2183 | 1295  | 0.776 7817 | 9.994 0133 | 36 | 30 |    |
|    | 40 | 9.217 3575 | 1259 | 9.223 3478 | 1294  | 0.776 6522 | 9.994 0097 | 35 | 20 |    |
|    | 50 | 9.217 4834 | 1258 | 9.223 4772 | 1293  | 0.776 5228 | 9.994 0062 | 35 | 10 |    |
| 30 | 0  | 9.217 6092 |      | 9.223 6065 |       | 0.776 3935 | 9.994 0027 | 35 | 0  | 30 |



|    | n  | Sin        | d.   | Tang       | d. c. | Cotg       | Cos        | d. | n  | i  |
|----|----|------------|------|------------|-------|------------|------------|----|----|----|
| 30 | 0  | 9.217 6092 | 1258 | 9.223 6065 | 1294  | 0.776 3935 | 9.994 0027 | 35 | 0  | 30 |
|    | 10 | 9.217 7350 | 1258 | 9.223 7359 | 1293  | 0.776 2641 | 9.993 9992 | 36 | 50 |    |
|    | 20 | 9.217 8608 | 1257 | 9.223 8652 | 1292  | 0.776 1348 | 9.993 9956 | 35 | 40 |    |
|    | 30 | 9.217 9865 | 1257 | 9.223 9944 | 1292  | 0.776 0056 | 9.993 9921 | 35 | 30 |    |
|    | 40 | 9.218 1122 | 1257 | 9.224 1236 | 1292  | 0.775 8764 | 9.993 9886 | 35 | 20 |    |
|    | 50 | 9.218 2379 | 1256 | 9.224 2528 | 1291  | 0.775 7472 | 9.993 9851 | 36 | 10 |    |
| 31 | 0  | 9.218 3635 | 1256 | 9.224 3819 | 1292  | 0.775 6181 | 9.993 9815 | 35 | 0  | 29 |
|    | 10 | 9.218 4891 | 1255 | 9.224 5111 | 1290  | 0.775 4889 | 9.993 9780 | 35 | 50 |    |
|    | 20 | 9.218 6146 | 1255 | 9.224 6401 | 1291  | 0.775 3599 | 9.993 9745 | 36 | 40 |    |
|    | 30 | 9.218 7401 | 1255 | 9.224 7692 | 1290  | 0.775 2308 | 9.993 9709 | 36 | 30 |    |
|    | 40 | 9.218 8656 | 1254 | 9.224 8982 | 1289  | 0.775 1018 | 9.993 9674 | 35 | 20 |    |
|    | 50 | 9.218 9910 | 1254 | 9.225 0291 | 1290  | 0.774 9729 | 9.993 9639 | 36 | 10 |    |
| 32 | 0  | 9.219 1164 | 1253 | 9.225 1561 | 1288  | 0.774 8439 | 9.993 9603 | 35 | 0  | 28 |
|    | 10 | 9.219 2417 | 1254 | 9.225 2849 | 1289  | 0.774 7151 | 9.993 9568 | 35 | 50 |    |
|    | 20 | 9.219 3671 | 1252 | 9.225 4138 | 1288  | 0.774 5862 | 9.993 9533 | 36 | 40 |    |
|    | 30 | 9.219 4923 | 1253 | 9.225 5426 | 1288  | 0.774 4574 | 9.993 9497 | 36 | 30 |    |
|    | 40 | 9.219 6176 | 1252 | 9.225 6714 | 1287  | 0.774 3286 | 9.993 9462 | 35 | 20 |    |
|    | 50 | 9.219 7428 | 1252 | 9.225 8001 | 1288  | 0.774 1999 | 9.993 9426 | 35 | 10 |    |
| 33 | 0  | 9.219 8680 | 1251 | 9.225 9289 | 1286  | 0.774 0711 | 9.993 9391 | 35 | 0  | 27 |
|    | 10 | 9.219 9931 | 1251 | 9.226 0575 | 1287  | 0.773 9425 | 9.993 9356 | 35 | 50 |    |
|    | 20 | 9.220 1182 | 1250 | 9.226 1862 | 1286  | 0.773 8138 | 9.993 9320 | 36 | 40 |    |
|    | 30 | 9.220 2432 | 1251 | 9.226 3148 | 1285  | 0.773 6852 | 9.993 9285 | 36 | 30 |    |
|    | 40 | 9.220 3684 | 1249 | 9.226 4431 | 1286  | 0.773 5567 | 9.993 9249 | 36 | 20 |    |
|    | 50 | 9.220 4932 | 1250 | 9.226 5719 | 1285  | 0.773 4281 | 9.993 9214 | 36 | 10 |    |
| 34 | 0  | 9.220 6182 | 1249 | 9.226 7004 | 1284  | 0.773 2996 | 9.993 9178 | 35 | 0  | 26 |
|    | 10 | 9.220 7431 | 1249 | 9.226 8288 | 1284  | 0.773 1712 | 9.993 9143 | 36 | 50 |    |
|    | 20 | 9.220 8680 | 1248 | 9.226 9572 | 1284  | 0.773 0428 | 9.993 9107 | 36 | 40 |    |
|    | 30 | 9.220 9928 | 1248 | 9.227 0856 | 1284  | 0.772 9144 | 9.993 9072 | 36 | 30 |    |
|    | 40 | 9.221 1176 | 1248 | 9.227 2140 | 1284  | 0.772 7860 | 9.993 9036 | 36 | 20 |    |
|    | 50 | 9.221 2424 | 1247 | 9.227 3424 | 1284  | 0.772 6577 | 9.993 8999 | 36 | 10 |    |
| 35 | 0  | 9.221 3671 | 1247 | 9.227 4706 | 1282  | 0.772 5294 | 9.993 8965 | 35 | 0  | 25 |
|    | 10 | 9.221 4918 | 1246 | 9.227 5988 | 1282  | 0.772 4012 | 9.993 8930 | 36 | 50 |    |
|    | 20 | 9.221 6164 | 1246 | 9.227 7270 | 1282  | 0.772 2730 | 9.993 8894 | 36 | 40 |    |
|    | 30 | 9.221 7410 | 1246 | 9.227 8552 | 1281  | 0.772 1448 | 9.993 8858 | 36 | 30 |    |
|    | 40 | 9.221 8656 | 1246 | 9.227 9833 | 1281  | 0.772 0167 | 9.993 8823 | 36 | 20 |    |
|    | 50 | 9.221 9902 | 1245 | 9.228 1114 | 1281  | 0.771 8886 | 9.993 8787 | 36 | 10 |    |
| 36 | 0  | 9.222 1147 | 1244 | 9.228 2395 | 1280  | 0.771 7605 | 9.993 8752 | 36 | 0  | 24 |
|    | 10 | 9.222 2391 | 1245 | 9.228 3675 | 1280  | 0.771 6325 | 9.993 8716 | 36 | 50 |    |
|    | 20 | 9.222 3636 | 1244 | 9.228 4955 | 1280  | 0.771 5045 | 9.993 8680 | 36 | 40 |    |
|    | 30 | 9.222 4880 | 1244 | 9.228 6235 | 1279  | 0.771 3765 | 9.993 8645 | 35 | 30 |    |
|    | 40 | 9.222 6123 | 1243 | 9.228 7514 | 1279  | 0.771 2486 | 9.993 8609 | 36 | 20 |    |
|    | 50 | 9.222 7366 | 1243 | 9.228 8793 | 1278  | 0.771 1207 | 9.993 8574 | 36 | 10 |    |
| 37 | 0  | 9.222 8609 | 1243 | 9.229 0071 | 1279  | 0.770 9929 | 9.993 8538 | 36 | 0  | 23 |
|    | 10 | 9.222 9853 | 1243 | 9.229 1350 | 1277  | 0.770 8650 | 9.993 8502 | 36 | 50 |    |
|    | 20 | 9.223 1094 | 1242 | 9.229 2627 | 1278  | 0.770 7373 | 9.993 8466 | 35 | 40 |    |
|    | 30 | 9.223 2336 | 1241 | 9.229 3905 | 1277  | 0.770 6095 | 9.993 8431 | 36 | 30 |    |
|    | 40 | 9.223 3577 | 1241 | 9.229 5182 | 1277  | 0.770 4818 | 9.993 8395 | 36 | 20 |    |
|    | 50 | 9.223 4818 | 1241 | 9.229 6459 | 1276  | 0.770 3541 | 9.993 8359 | 35 | 10 |    |
| 38 | 0  | 9.223 6059 | 1240 | 9.229 7735 | 1276  | 0.770 2265 | 9.993 8324 | 36 | 0  | 22 |
|    | 10 | 9.223 7299 | 1240 | 9.229 9011 | 1276  | 0.770 0989 | 9.993 8288 | 36 | 50 |    |
|    | 20 | 9.223 8539 | 1239 | 9.230 0287 | 1275  | 0.769 9713 | 9.993 8252 | 36 | 40 |    |
|    | 30 | 9.223 9778 | 1239 | 9.230 1562 | 1275  | 0.769 8438 | 9.993 8216 | 35 | 30 |    |
|    | 40 | 9.224 1018 | 1238 | 9.230 2837 | 1275  | 0.769 7163 | 9.993 8181 | 36 | 20 |    |
|    | 50 | 9.224 2256 | 1239 | 9.230 4112 | 1274  | 0.769 5888 | 9.993 8145 | 36 | 10 |    |
| 39 | 0  | 9.224 3493 | 1238 | 9.230 5386 | 1274  | 0.769 4614 | 9.993 8109 | 36 | 0  | 21 |
|    | 10 | 9.224 4733 | 1237 | 9.230 6660 | 1273  | 0.769 3340 | 9.993 8073 | 36 | 50 |    |
|    | 20 | 9.224 5971 | 1237 | 9.230 7933 | 1274  | 0.769 2067 | 9.993 8037 | 35 | 40 |    |
|    | 30 | 9.224 7208 | 1237 | 9.230 9207 | 1274  | 0.769 0793 | 9.993 8001 | 36 | 30 |    |
|    | 40 | 9.224 8445 | 1237 | 9.231 0479 | 1273  | 0.768 9521 | 9.993 7966 | 36 | 20 |    |
|    | 50 | 9.224 9682 | 1236 | 9.231 1752 | 1272  | 0.768 8248 | 9.993 7930 | 36 | 10 |    |
| 40 | 0  | 9.225 0918 |      | 9.231 3024 |       | 0.768 6976 | 9.993 7894 |    | 0  | 20 |

1290

1 129

2 258

3 387

4 516

5 645

6 774

7 903

8 1032

9 1161

1280

1 128

2 256

3 384

4 512

5 640

6 768

7 896

8 1024

9 1152

1270

1 127

2 254

3 381

4 508

5 635

6 762

7 889

8 1016

9 1147

1260

1 126

2 252

3 378

4 504

5 630

6 756

7 882

8 1008

9 1134

1250

1 125

2 250

3 375

4 500

5 625

6 750

7 875

8 1000

9 1125

1240

1 124

2 248

3 372

4 496

5 620

6 744

7 868

8 992

9 1116

1230

1 123

2 246

3 369

4 492

5 615

6 738

7 861

8 984

9 1107



|      |    | Sin         | d.   | Tang       | d. c. | Cotg       | Cos        | d. |    |    |
|------|----|-------------|------|------------|-------|------------|------------|----|----|----|
| 1270 | 40 | 0.9225 0918 | 1236 | 9.231 3024 | 1272  | 0.768 6976 | 9.993 7894 | 36 | 0  | 20 |
| 127  | 10 | 9.225 2154  | 1236 | 9.231 4296 | 1271  | 0.768 5704 | 9.993 7858 | 36 | 50 |    |
| 254  | 20 | 9.225 3390  | 1235 | 9.231 5567 | 1271  | 0.768 4433 | 9.993 7822 | 36 | 40 |    |
| 381  | 30 | 9.225 4625  | 1235 | 9.231 6838 | 1271  | 0.768 3162 | 9.993 7786 | 36 | 30 |    |
| 508  | 40 | 9.225 5860  | 1234 | 9.231 8109 | 1271  | 0.768 1891 | 9.993 7750 | 36 | 20 |    |
| 635  | 50 | 9.225 7094  | 1234 | 9.231 9380 | 1270  | 0.768 0620 | 9.993 7715 | 36 | 10 |    |
| 762  |    |             |      |            |       |            |            |    |    |    |
| 889  | 41 | 0.9225 8328 | 1234 | 9.232 0650 | 1269  | 0.767 9350 | 9.993 7679 | 36 | 0  | 19 |
| 1016 | 10 | 9.225 9562  | 1233 | 9.232 1919 | 1270  | 0.767 8081 | 9.993 7643 | 36 | 50 |    |
| 1143 | 20 | 9.226 0795  | 1233 | 9.232 3189 | 1269  | 0.767 6811 | 9.993 7607 | 36 | 40 |    |
|      | 30 | 9.226 2028  | 1233 | 9.232 4458 | 1268  | 0.767 5542 | 9.993 7571 | 36 | 30 |    |
| 1260 | 40 | 9.226 3261  | 1232 | 9.232 5726 | 1269  | 0.767 4274 | 9.993 7535 | 36 | 20 |    |
| 126  | 50 | 9.226 4493  | 1232 | 9.232 6995 | 1267  | 0.767 3005 | 9.993 7499 | 36 | 10 |    |
| 254  |    |             |      |            |       |            |            |    |    |    |
| 378  | 42 | 0.9226 5725 | 1232 | 9.232 8262 | 1268  | 0.767 1738 | 9.993 7463 | 36 | 0  | 18 |
| 504  | 10 | 9.226 6957  | 1231 | 9.232 9530 | 1267  | 0.767 0470 | 9.993 7427 | 36 | 50 |    |
| 630  | 20 | 9.226 8188  | 1231 | 9.233 0797 | 1267  | 0.766 9203 | 9.993 7391 | 36 | 40 |    |
| 756  | 30 | 9.226 9419  | 1231 | 9.233 2064 | 1267  | 0.766 7936 | 9.993 7355 | 36 | 30 |    |
| 881  | 40 | 9.227 0650  | 1230 | 9.233 3331 | 1266  | 0.766 6669 | 9.993 7319 | 36 | 20 |    |
| 1008 | 50 | 9.227 1880  | 1230 | 9.233 4597 | 1266  | 0.766 5403 | 9.993 7283 | 36 | 10 |    |
| 1134 |    |             |      |            |       |            |            |    |    |    |
|      | 43 | 0.9227 3110 | 1229 | 9.233 5863 | 1265  | 0.766 4137 | 9.993 7247 | 36 | 0  | 17 |
| 1250 | 10 | 9.227 4339  | 1229 | 9.233 7128 | 1265  | 0.766 2872 | 9.993 7211 | 36 | 50 |    |
| 125  | 20 | 9.227 5568  | 1229 | 9.233 8393 | 1265  | 0.766 1607 | 9.993 7175 | 36 | 40 |    |
| 250  | 30 | 9.227 6797  | 1228 | 9.233 9658 | 1265  | 0.766 0342 | 9.993 7139 | 37 | 30 |    |
| 375  | 40 | 9.227 8025  | 1228 | 9.234 0923 | 1264  | 0.765 9077 | 9.993 7102 | 36 | 20 |    |
| 500  | 50 | 9.227 9253  | 1228 | 9.234 2187 | 1264  | 0.765 7813 | 9.993 7066 | 36 | 10 |    |
| 625  |    |             |      |            |       |            |            |    |    |    |
| 750  | 44 | 0.9228 0481 | 1227 | 9.234 3451 | 1263  | 0.765 6549 | 9.993 7030 | 36 | 0  | 16 |
| 875  | 10 | 9.228 1708  | 1227 | 9.234 4714 | 1263  | 0.765 5286 | 9.993 6994 | 36 | 50 |    |
| 1000 | 20 | 9.228 2935  | 1227 | 9.234 5977 | 1263  | 0.765 4023 | 9.993 6958 | 36 | 40 |    |
| 1125 | 30 | 9.228 4162  | 1226 | 9.234 7240 | 1262  | 0.765 2760 | 9.993 6922 | 36 | 30 |    |
|      | 40 | 9.228 5388  | 1226 | 9.234 8502 | 1262  | 0.765 1498 | 9.993 6886 | 36 | 20 |    |
| 1240 | 50 | 9.228 6614  | 1225 | 9.234 9764 | 1262  | 0.765 0236 | 9.993 6849 | 36 | 10 |    |
| 124  |    |             |      |            |       |            |            |    |    |    |
| 248  | 45 | 0.9228 7839 | 1225 | 9.235 1026 | 1261  | 0.764 8974 | 9.993 6813 | 36 | 0  | 15 |
| 372  | 10 | 9.228 9064  | 1225 | 9.235 2287 | 1261  | 0.764 7713 | 9.993 6777 | 36 | 50 |    |
| 496  | 20 | 9.229 0289  | 1225 | 9.235 3548 | 1261  | 0.764 6452 | 9.993 6741 | 36 | 40 |    |
| 620  | 30 | 9.229 1514  | 1224 | 9.235 4809 | 1260  | 0.764 5191 | 9.993 6705 | 36 | 30 |    |
| 744  | 40 | 9.229 2738  | 1224 | 9.235 6069 | 1260  | 0.764 3931 | 9.993 6669 | 36 | 20 |    |
| 868  | 50 | 9.229 3962  | 1223 | 9.235 7329 | 1260  | 0.764 2671 | 9.993 6632 | 37 | 10 |    |
| 992  |    |             |      |            |       |            |            |    |    |    |
| 1116 | 46 | 0.9229 5185 | 1223 | 9.235 8589 | 1259  | 0.764 1411 | 9.993 6596 | 36 | 0  | 14 |
|      | 10 | 9.229 6408  | 1223 | 9.235 9848 | 1259  | 0.764 0152 | 9.993 6560 | 36 | 50 |    |
| 1230 | 20 | 9.229 7631  | 1222 | 9.236 1107 | 1259  | 0.763 8893 | 9.993 6524 | 36 | 40 |    |
| 123  | 30 | 9.229 8853  | 1222 | 9.236 2366 | 1258  | 0.763 7634 | 9.993 6487 | 37 | 30 |    |
| 246  | 40 | 9.230 0075  | 1222 | 9.236 3624 | 1258  | 0.763 6376 | 9.993 6451 | 36 | 20 |    |
| 369  | 50 | 9.230 1297  | 1221 | 9.236 4882 | 1257  | 0.763 5118 | 9.993 6415 | 37 | 10 |    |
| 492  |    |             |      |            |       |            |            |    |    |    |
| 615  | 47 | 0.9230 2518 | 1221 | 9.236 6139 | 1258  | 0.763 3861 | 9.993 6378 | 36 | 0  | 13 |
| 738  | 10 | 9.230 3739  | 1220 | 9.236 7397 | 1256  | 0.763 2603 | 9.993 6342 | 36 | 50 |    |
| 861  | 20 | 9.230 4959  | 1220 | 9.236 8653 | 1257  | 0.763 1347 | 9.993 6306 | 37 | 40 |    |
| 984  | 30 | 9.230 6179  | 1220 | 9.236 9910 | 1256  | 0.763 0090 | 9.993 6269 | 36 | 30 |    |
| 1107 | 40 | 9.230 7399  | 1220 | 9.237 1166 | 1256  | 0.762 8834 | 9.993 6233 | 36 | 20 |    |
|      | 50 | 9.230 8619  | 1219 | 9.237 2422 | 1256  | 0.762 7578 | 9.993 6197 | 37 | 10 |    |
| 1220 |    |             |      |            |       |            |            |    |    |    |
| 122  | 48 | 0.9230 9838 | 1219 | 9.237 3678 | 1255  | 0.762 6322 | 9.993 6160 | 36 | 0  | 12 |
| 244  | 10 | 9.231 1057  | 1218 | 9.237 4933 | 1255  | 0.762 5067 | 9.993 6124 | 36 | 50 |    |
| 366  | 20 | 9.231 2275  | 1218 | 9.237 6188 | 1254  | 0.762 3812 | 9.993 6088 | 37 | 40 |    |
| 488  | 30 | 9.231 3493  | 1218 | 9.237 7442 | 1254  | 0.762 2558 | 9.993 6051 | 36 | 30 |    |
| 610  | 40 | 9.231 4711  | 1217 | 9.237 8696 | 1254  | 0.762 1304 | 9.993 6015 | 37 | 20 |    |
| 732  | 50 | 9.231 5928  | 1217 | 9.237 9950 | 1253  | 0.762 0050 | 9.993 5978 | 36 | 10 |    |
| 854  |    |             |      |            |       |            |            |    |    |    |
| 976  | 49 | 0.9231 7145 | 1217 | 9.238 1203 | 1254  | 0.761 8797 | 9.993 5942 | 36 | 0  | 11 |
| 1098 | 10 | 9.231 8362  | 1216 | 9.238 2457 | 1252  | 0.761 7543 | 9.993 5906 | 37 | 50 |    |
|      | 20 | 9.231 9578  | 1216 | 9.238 3709 | 1252  | 0.761 6291 | 9.993 5869 | 36 | 40 |    |
| 1210 | 30 | 9.232 0794  | 1216 | 9.238 4962 | 1252  | 0.761 5038 | 9.993 5833 | 36 | 30 |    |
| 121  | 40 | 9.232 2010  | 1215 | 9.238 6214 | 1252  | 0.761 3786 | 9.993 5796 | 36 | 20 |    |
| 242  | 50 | 9.232 3225  | 1215 | 9.238 7466 | 1251  | 0.761 2534 | 9.993 5760 | 37 | 10 |    |
| 363  |    |             |      |            |       |            |            |    |    |    |
| 484  | 50 | 0.9232 4440 | 1215 | 9.238 8717 | 1251  | 0.761 1283 | 9.993 5723 | 37 | 0  | 10 |
| 605  |    |             |      |            |       |            |            |    |    |    |
| 726  |    |             |      |            |       |            |            |    |    |    |
| 847  |    |             |      |            |       |            |            |    |    |    |
| 968  |    |             |      |            |       |            |            |    |    |    |
| 1089 |    |             |      |            |       |            |            |    |    |    |
|      |    | Cos         | d.   | Cotg       | d. c. | Tang       | Sin        | d. |    |    |



|    | "  | sin        | d.   | Tang       | d. c. | Cotg       | Cos        | d. | "  |    |
|----|----|------------|------|------------|-------|------------|------------|----|----|----|
| 50 | 0  | 9.232 4440 | 1215 | 9.238 8717 | 1251  | 0.761 1283 | 9.993 5723 | 36 | 0  | 10 |
|    | 10 | 9.232 5655 | 1214 | 9.238 9968 | 1251  | 0.761 0032 | 9.993 5687 | 37 | 50 |    |
|    | 20 | 9.232 6869 | 1214 | 9.239 1219 | 1250  | 0.760 8781 | 9.993 5650 | 36 | 40 |    |
|    | 30 | 9.232 8083 | 1213 | 9.239 2469 | 1250  | 0.760 7531 | 9.993 5614 | 37 | 30 |    |
|    | 40 | 9.232 9296 | 1214 | 9.239 3719 | 1250  | 0.760 6281 | 9.993 5577 | 36 | 20 |    |
|    | 50 | 9.233 0510 | 1212 | 9.239 4969 | 1249  | 0.760 5031 | 9.993 5541 | 37 | 10 |    |
| 51 | 0  | 9.233 1722 | 1213 | 9.239 6218 | 1249  | 0.760 3782 | 9.993 5504 | 37 | 0  | 9  |
|    | 10 | 9.233 2935 | 1212 | 9.239 7467 | 1249  | 0.760 2533 | 9.993 5467 | 36 | 50 |    |
|    | 20 | 9.233 4147 | 1212 | 9.239 8716 | 1248  | 0.760 1284 | 9.993 5431 | 37 | 40 |    |
|    | 30 | 9.233 5359 | 1211 | 9.239 9964 | 1249  | 0.760 0036 | 9.993 5394 | 36 | 30 |    |
|    | 40 | 9.233 6570 | 1211 | 9.240 1213 | 1247  | 0.759 8787 | 9.993 5358 | 37 | 20 |    |
|    | 50 | 9.233 7781 | 1211 | 9.240 2460 | 1248  | 0.759 7540 | 9.993 5321 | 36 | 10 |    |
| 52 | 0  | 9.233 8992 | 1210 | 9.240 3708 | 1247  | 0.759 6292 | 9.993 5285 | 37 | 0  | 8  |
|    | 10 | 9.234 0202 | 1211 | 9.240 4955 | 1246  | 0.759 5045 | 9.993 5248 | 37 | 50 |    |
|    | 20 | 9.234 1413 | 1209 | 9.240 6201 | 1247  | 0.759 3799 | 9.993 5211 | 36 | 40 |    |
|    | 30 | 9.234 2622 | 1210 | 9.240 7448 | 1246  | 0.759 2552 | 9.993 5175 | 37 | 30 |    |
|    | 40 | 9.234 3832 | 1209 | 9.240 8694 | 1245  | 0.759 1306 | 9.993 5138 | 37 | 20 |    |
|    | 50 | 9.234 5041 | 1208 | 9.240 9939 | 1246  | 0.759 0061 | 9.993 5101 | 36 | 10 |    |
| 53 | 0  | 9.234 6249 | 1209 | 9.241 1185 | 1245  | 0.758 8815 | 9.993 5065 | 37 | 0  | 7  |
|    | 10 | 9.234 7458 | 1208 | 9.241 2430 | 1244  | 0.758 7570 | 9.993 5028 | 37 | 50 |    |
|    | 20 | 9.234 8666 | 1207 | 9.241 3674 | 1245  | 0.758 6326 | 9.993 4991 | 36 | 40 |    |
|    | 30 | 9.234 9873 | 1207 | 9.241 4919 | 1244  | 0.758 5081 | 9.993 4955 | 37 | 30 |    |
|    | 40 | 9.235 1080 | 1207 | 9.241 6163 | 1243  | 0.758 3837 | 9.993 4918 | 37 | 20 |    |
|    | 50 | 9.235 2287 | 1207 | 9.241 7406 | 1244  | 0.758 2594 | 9.993 4881 | 37 | 10 |    |
| 54 | 0  | 9.235 3493 | 1206 | 9.241 8650 | 1243  | 0.758 1350 | 9.993 4844 | 36 | 0  | 6  |
|    | 10 | 9.235 4700 | 1206 | 9.241 9893 | 1242  | 0.758 0107 | 9.993 4808 | 37 | 50 |    |
|    | 20 | 9.235 5906 | 1206 | 9.242 1135 | 1243  | 0.757 8865 | 9.993 4771 | 37 | 40 |    |
|    | 30 | 9.235 7112 | 1205 | 9.242 2378 | 1242  | 0.757 7622 | 9.993 4734 | 37 | 30 |    |
|    | 40 | 9.235 8317 | 1205 | 9.242 3620 | 1241  | 0.757 6380 | 9.993 4697 | 37 | 20 |    |
|    | 50 | 9.235 9522 | 1204 | 9.242 4861 | 1242  | 0.757 5139 | 9.993 4660 | 36 | 10 |    |
| 55 | 0  | 9.236 0726 | 1203 | 9.242 6103 | 1240  | 0.757 3897 | 9.993 4624 | 37 | 0  | 5  |
|    | 10 | 9.236 1930 | 1201 | 9.242 7343 | 1241  | 0.757 2657 | 9.993 4587 | 37 | 50 |    |
|    | 20 | 9.236 3134 | 1201 | 9.242 8584 | 1240  | 0.757 1416 | 9.993 4550 | 37 | 40 |    |
|    | 30 | 9.236 4338 | 1203 | 9.242 9824 | 1240  | 0.757 0176 | 9.993 4513 | 37 | 30 |    |
|    | 40 | 9.236 5541 | 1203 | 9.243 1064 | 1240  | 0.756 8936 | 9.993 4476 | 37 | 20 |    |
|    | 50 | 9.236 6744 | 1202 | 9.243 2304 | 1239  | 0.756 7696 | 9.993 4439 | 36 | 10 |    |
| 56 | 0  | 9.236 7946 | 1202 | 9.243 3543 | 1239  | 0.756 6457 | 9.993 4403 | 37 | 0  | 4  |
|    | 10 | 9.236 9148 | 1202 | 9.243 4782 | 1239  | 0.756 5218 | 9.993 4366 | 37 | 50 |    |
|    | 20 | 9.237 0350 | 1201 | 9.243 6021 | 1238  | 0.756 3979 | 9.993 4329 | 37 | 40 |    |
|    | 30 | 9.237 1551 | 1201 | 9.243 7259 | 1238  | 0.756 2741 | 9.993 4292 | 37 | 30 |    |
|    | 40 | 9.237 2753 | 1201 | 9.243 8497 | 1238  | 0.756 1503 | 9.993 4255 | 37 | 20 |    |
|    | 50 | 9.237 3954 | 1200 | 9.243 9735 | 1237  | 0.756 0265 | 9.993 4218 | 37 | 10 |    |
| 57 | 0  | 9.237 5155 | 1201 | 9.244 0972 | 1237  | 0.755 9028 | 9.993 4181 | 37 | 0  | 3  |
|    | 10 | 9.237 6356 | 1199 | 9.244 2209 | 1237  | 0.755 7791 | 9.993 4144 | 37 | 50 |    |
|    | 20 | 9.237 7557 | 1200 | 9.244 3446 | 1236  | 0.755 6554 | 9.993 4107 | 37 | 40 |    |
|    | 30 | 9.237 8758 | 1199 | 9.244 4682 | 1236  | 0.755 5318 | 9.993 4070 | 37 | 30 |    |
|    | 40 | 9.237 9959 | 1198 | 9.244 5918 | 1236  | 0.755 4082 | 9.993 4033 | 37 | 20 |    |
|    | 50 | 9.238 1159 | 1199 | 9.244 7154 | 1235  | 0.755 2846 | 9.993 3996 | 37 | 10 |    |
| 58 | 0  | 9.238 2359 | 1198 | 9.244 8389 | 1235  | 0.755 1611 | 9.993 3959 | 37 | 0  | 2  |
|    | 10 | 9.238 3557 | 1197 | 9.244 9624 | 1235  | 0.755 0376 | 9.993 3922 | 37 | 50 |    |
|    | 20 | 9.238 4754 | 1198 | 9.245 0859 | 1234  | 0.754 9141 | 9.993 3885 | 37 | 40 |    |
|    | 30 | 9.238 5952 | 1197 | 9.245 2093 | 1234  | 0.754 7907 | 9.993 3848 | 37 | 30 |    |
|    | 40 | 9.238 7150 | 1196 | 9.245 3327 | 1234  | 0.754 6673 | 9.993 3811 | 37 | 20 |    |
|    | 50 | 9.238 8348 | 1197 | 9.245 4561 | 1233  | 0.754 5439 | 9.993 3774 | 37 | 10 |    |
| 59 | 0  | 9.238 9543 | 1196 | 9.245 5794 | 1233  | 0.754 4206 | 9.993 3737 | 37 | 0  | 1  |
|    | 10 | 9.239 0738 | 1195 | 9.245 7027 | 1233  | 0.754 2973 | 9.993 3700 | 37 | 50 |    |
|    | 20 | 9.239 1933 | 1195 | 9.245 8260 | 1233  | 0.754 1740 | 9.993 3663 | 37 | 40 |    |
|    | 30 | 9.239 3128 | 1195 | 9.245 9493 | 1232  | 0.754 0507 | 9.993 3626 | 37 | 30 |    |
|    | 40 | 9.239 4323 | 1195 | 9.246 0725 | 1231  | 0.753 9275 | 9.993 3589 | 37 | 20 |    |
|    | 50 | 9.239 5518 | 1194 | 9.246 1956 | 1232  | 0.753 8044 | 9.993 3552 | 37 | 10 |    |
| 60 | 0  | 9.239 6712 |      | 9.246 3188 |       | 0.753 6812 | 9.993 3515 | 37 | 0  | 0  |

|      |   |      |
|------|---|------|
| 1250 | 1 | 125  |
|      | 2 | 250  |
|      | 3 | 375  |
|      | 4 | 500  |
|      | 5 | 625  |
|      | 6 | 750  |
|      | 7 | 875  |
|      | 8 | 1000 |
|      | 9 | 1125 |
| 1240 | 1 | 124  |
|      | 2 | 248  |
|      | 3 | 372  |
|      | 4 | 496  |
|      | 5 | 620  |
|      | 6 | 744  |
|      | 7 | 868  |
|      | 8 | 992  |
|      | 9 | 1116 |
| 1230 | 1 | 123  |
|      | 2 | 246  |
|      | 3 | 369  |
|      | 4 | 492  |
|      | 5 | 615  |
|      | 6 | 738  |
|      | 7 | 861  |
|      | 8 | 984  |
|      | 9 | 1107 |
| 1220 | 1 | 122  |
|      | 2 | 244  |
|      | 3 | 366  |
|      | 4 | 488  |
|      | 5 | 610  |
|      | 6 | 732  |
|      | 7 | 854  |
|      | 8 | 976  |
|      | 9 | 1098 |
| 1210 | 1 | 121  |
|      | 2 | 242  |
|      | 3 | 364  |
|      | 4 | 486  |
|      | 5 | 608  |
|      | 6 | 730  |
|      | 7 | 852  |
|      | 8 | 974  |
|      | 9 | 1096 |
| 1200 | 1 | 120  |
|      | 2 | 240  |
|      | 3 | 360  |
|      | 4 | 480  |
|      | 5 | 600  |
|      | 6 | 720  |
|      | 7 | 840  |
|      | 8 | 960  |
|      | 9 | 1080 |
| 1190 | 1 | 119  |
|      | 2 | 238  |
|      | 3 | 357  |
|      | 4 | 476  |
|      | 5 | 595  |
|      | 6 | 714  |
|      | 7 | 833  |
|      | 8 | 952  |
|      | 9 | 1071 |



1230

1 123

2 246

3 369

4 492

5 615

6 738

7 861

8 984

9 1107

1220

1 122

2 244

3 366

4 488

5 610

6 732

7 854

8 976

9 1098

210

1 121

2 242

3 363

4 484

5 605

6 726

7 847

8 968

9 1089

1200

1 120

2 240

3 360

4 480

5 600

6 720

7 840

8 960

9 1080

37

1 37

2 74

3 111

4 148

5 185

6 222

7 259

8 296

9 333

38

1 38

2 76

3 114

4 152

5 190

6 228

7 266

8 304

9 342

|    | "  | Sin        | d.   | Tang       | d. c. | Cotg       | Cos        | d. | "  |    |
|----|----|------------|------|------------|-------|------------|------------|----|----|----|
| 0  | 0  | 9.239 6702 | 1194 | 9.246 3188 | 1231  | 0.753 6812 | 9.993 3515 | 38 | 0  | 60 |
|    | 10 | 9.239 7896 | 1194 | 9.246 4419 | 1231  | 0.753 5581 | 9.993 3477 | 37 | 50 |    |
|    | 20 | 9.239 9090 | 1193 | 9.246 5650 | 1230  | 0.753 4350 | 9.993 3440 | 37 | 40 |    |
|    | 30 | 9.240 0283 | 1193 | 9.246 6880 | 1230  | 0.753 3120 | 9.993 3403 | 37 | 30 |    |
|    | 40 | 9.240 1476 | 1193 | 9.246 8110 | 1230  | 0.753 1890 | 9.993 3366 | 37 | 20 |    |
|    | 50 | 9.240 2669 | 1192 | 9.246 9340 | 1229  | 0.753 0660 | 9.993 3329 | 37 | 10 |    |
| 1  | 0  | 9.240 3861 | 1192 | 9.247 0569 | 1229  | 0.752 9431 | 9.993 3292 | 37 | 0  | 59 |
|    | 10 | 9.240 5053 | 1191 | 9.247 1798 | 1229  | 0.752 8202 | 9.993 3254 | 37 | 50 |    |
|    | 20 | 9.240 6244 | 1192 | 9.247 3027 | 1228  | 0.752 6973 | 9.993 3217 | 37 | 40 |    |
|    | 30 | 9.240 7436 | 1190 | 9.247 4255 | 1229  | 0.752 5745 | 9.993 3180 | 37 | 30 |    |
|    | 40 | 9.240 8626 | 1191 | 9.247 5484 | 1227  | 0.752 4516 | 9.993 3143 | 37 | 20 |    |
|    | 50 | 9.240 9817 | 1190 | 9.247 6711 | 1228  | 0.752 3289 | 9.993 3106 | 38 | 10 |    |
| 2  | 0  | 9.241 1007 | 1190 | 9.247 7939 | 1227  | 0.752 2061 | 9.993 3068 | 37 | 0  | 58 |
|    | 10 | 9.241 2197 | 1190 | 9.247 9166 | 1227  | 0.752 0834 | 9.993 3031 | 37 | 50 |    |
|    | 20 | 9.241 3387 | 1189 | 9.248 0393 | 1226  | 0.751 9607 | 9.993 2994 | 37 | 40 |    |
|    | 30 | 9.241 4576 | 1189 | 9.248 1619 | 1226  | 0.751 8381 | 9.993 2957 | 37 | 30 |    |
|    | 40 | 9.241 5765 | 1188 | 9.248 2845 | 1226  | 0.751 7155 | 9.993 2919 | 37 | 20 |    |
|    | 50 | 9.241 6953 | 1188 | 9.248 4071 | 1226  | 0.751 5929 | 9.993 2882 | 37 | 10 |    |
| 3  | 0  | 9.241 8141 | 1188 | 9.248 5297 | 1225  | 0.751 4703 | 9.993 2845 | 37 | 0  | 57 |
|    | 10 | 9.241 9329 | 1188 | 9.248 6522 | 1225  | 0.751 3478 | 9.993 2807 | 37 | 50 |    |
|    | 20 | 9.242 0517 | 1187 | 9.248 7747 | 1224  | 0.751 2253 | 9.993 2770 | 37 | 40 |    |
|    | 30 | 9.242 1704 | 1187 | 9.248 8971 | 1224  | 0.751 1029 | 9.993 2733 | 37 | 30 |    |
|    | 40 | 9.242 2891 | 1186 | 9.249 0196 | 1225  | 0.750 9804 | 9.993 2695 | 37 | 20 |    |
|    | 50 | 9.242 4077 | 1187 | 9.249 1420 | 1223  | 0.750 8580 | 9.993 2658 | 37 | 10 |    |
| 4  | 0  | 9.242 5264 | 1185 | 9.249 2643 | 1223  | 0.750 7357 | 9.993 2621 | 37 | 0  | 56 |
|    | 10 | 9.242 6449 | 1186 | 9.249 3866 | 1223  | 0.750 6134 | 9.993 2583 | 38 | 50 |    |
|    | 20 | 9.242 7635 | 1185 | 9.249 5089 | 1223  | 0.750 4911 | 9.993 2546 | 38 | 40 |    |
|    | 30 | 9.242 8820 | 1185 | 9.249 6312 | 1223  | 0.750 3688 | 9.993 2508 | 38 | 30 |    |
|    | 40 | 9.243 0005 | 1185 | 9.249 7534 | 1222  | 0.750 2466 | 9.993 2471 | 37 | 20 |    |
|    | 50 | 9.243 1190 | 1184 | 9.249 8756 | 1222  | 0.750 1244 | 9.993 2434 | 38 | 10 |    |
| 5  | 0  | 9.243 2374 | 1184 | 9.249 9978 | 1221  | 0.750 0022 | 9.993 2396 | 37 | 0  | 55 |
|    | 10 | 9.243 3558 | 1183 | 9.250 1199 | 1221  | 0.749 8801 | 9.993 2359 | 38 | 50 |    |
|    | 20 | 9.243 4741 | 1183 | 9.250 2420 | 1221  | 0.749 7580 | 9.993 2321 | 38 | 40 |    |
|    | 30 | 9.243 5924 | 1183 | 9.250 3641 | 1220  | 0.749 6359 | 9.993 2284 | 38 | 30 |    |
|    | 40 | 9.243 7107 | 1183 | 9.250 4861 | 1220  | 0.749 5139 | 9.993 2246 | 38 | 20 |    |
|    | 50 | 9.243 8290 | 1182 | 9.250 6081 | 1220  | 0.749 3919 | 9.993 2209 | 37 | 10 |    |
| 6  | 0  | 9.243 9472 | 1182 | 9.250 7301 | 1219  | 0.749 2699 | 9.993 2171 | 37 | 0  | 54 |
|    | 10 | 9.244 0654 | 1181 | 9.250 8520 | 1219  | 0.749 1480 | 9.993 2134 | 38 | 50 |    |
|    | 20 | 9.244 1835 | 1182 | 9.250 9739 | 1219  | 0.749 0261 | 9.993 2096 | 38 | 40 |    |
|    | 30 | 9.244 3017 | 1180 | 9.251 0958 | 1218  | 0.748 9042 | 9.993 2059 | 38 | 30 |    |
|    | 40 | 9.244 4197 | 1181 | 9.251 2176 | 1218  | 0.748 7824 | 9.993 2021 | 37 | 20 |    |
|    | 50 | 9.244 5378 | 1180 | 9.251 3394 | 1218  | 0.748 6606 | 9.993 1984 | 38 | 10 |    |
| 7  | 0  | 9.244 6558 | 1180 | 9.251 4612 | 1218  | 0.748 5388 | 9.993 1946 | 38 | 0  | 53 |
|    | 10 | 9.244 7738 | 1180 | 9.251 5830 | 1217  | 0.748 4170 | 9.993 1908 | 37 | 50 |    |
|    | 20 | 9.244 8918 | 1179 | 9.251 7047 | 1217  | 0.748 2953 | 9.993 1871 | 38 | 40 |    |
|    | 30 | 9.245 0097 | 1179 | 9.251 8264 | 1216  | 0.748 1736 | 9.993 1833 | 37 | 30 |    |
|    | 40 | 9.245 1276 | 1178 | 9.251 9480 | 1216  | 0.748 0520 | 9.993 1796 | 38 | 20 |    |
|    | 50 | 9.245 2454 | 1178 | 9.252 0696 | 1216  | 0.747 9304 | 9.993 1758 | 38 | 10 |    |
| 8  | 0  | 9.245 3632 | 1178 | 9.252 1912 | 1216  | 0.747 8088 | 9.993 1720 | 37 | 0  | 52 |
|    | 10 | 9.245 4810 | 1178 | 9.252 3128 | 1215  | 0.747 6872 | 9.993 1683 | 38 | 50 |    |
|    | 20 | 9.245 5988 | 1177 | 9.252 4343 | 1215  | 0.747 5657 | 9.993 1645 | 38 | 40 |    |
|    | 30 | 9.245 7165 | 1177 | 9.252 5558 | 1214  | 0.747 4442 | 9.993 1607 | 37 | 30 |    |
|    | 40 | 9.245 8342 | 1177 | 9.252 6772 | 1215  | 0.747 3228 | 9.993 1570 | 37 | 20 |    |
|    | 50 | 9.245 9519 | 1176 | 9.252 7987 | 1213  | 0.747 2013 | 9.993 1532 | 38 | 10 |    |
| 9  | 0  | 9.246 0695 | 1176 | 9.252 9200 | 1214  | 0.747 0800 | 9.993 1494 | 37 | 0  | 51 |
|    | 10 | 9.246 1871 | 1175 | 9.253 0414 | 1213  | 0.746 9586 | 9.993 1457 | 38 | 50 |    |
|    | 20 | 9.246 3046 | 1176 | 9.253 1627 | 1213  | 0.746 8373 | 9.993 1419 | 38 | 40 |    |
|    | 30 | 9.246 4222 | 1175 | 9.253 2840 | 1213  | 0.746 7160 | 9.993 1381 | 37 | 30 |    |
|    | 40 | 9.246 5397 | 1174 | 9.253 4053 | 1212  | 0.746 5947 | 9.993 1344 | 38 | 20 |    |
|    | 50 | 9.246 6571 | 1175 | 9.253 5265 | 1212  | 0.746 4735 | 9.993 1306 | 38 | 10 |    |
| 10 | 0  | 9.246 7746 |      | 9.253 6477 |       | 0.746 3523 | 9.993 1268 |    | 0  | 50 |
|    | "  | Cos        | d.   | Cotg       | d. c. | Tang       | Sin        | d. | "  |    |



|    | "  | Sin        | d.   | Tang       | d. c. | Cotg       | Cos        | d. | "  |    |
|----|----|------------|------|------------|-------|------------|------------|----|----|----|
| 10 | o  | 9.246 7746 | 1173 | 9.253 6477 | 1212  | 0.746 3523 | 9.993 1268 | 38 | o  | 50 |
|    | 10 | 9.246 8919 | 1174 | 9.253 7689 | 1212  | 0.746 2311 | 9.993 1230 | 37 | 50 |    |
|    | 20 | 9.247 0093 | 1175 | 9.253 8901 | 1211  | 0.746 1099 | 9.993 1193 | 38 | 40 |    |
|    | 30 | 9.247 1266 | 1173 | 9.254 0112 | 1210  | 0.745 9888 | 9.993 1155 | 38 | 30 |    |
|    | 40 | 9.247 2439 | 1173 | 9.254 1322 | 1211  | 0.745 8678 | 9.993 1117 | 38 | 20 |    |
|    | 50 | 9.247 3612 | 1172 | 9.254 2533 | 1210  | 0.745 7467 | 9.993 1079 | 38 | 10 |    |
| 11 | o  | 9.247 4784 | 1172 | 9.254 3743 | 1210  | 0.745 6257 | 9.993 1041 | 37 | o  | 49 |
|    | 10 | 9.247 5956 | 1172 | 9.254 4953 | 1209  | 0.745 5047 | 9.993 1004 | 38 | 50 |    |
|    | 20 | 9.247 7128 | 1171 | 9.254 6162 | 1209  | 0.745 3838 | 9.993 0966 | 38 | 40 |    |
|    | 30 | 9.247 8299 | 1171 | 9.254 7371 | 1209  | 0.745 2629 | 9.993 0928 | 38 | 30 |    |
|    | 40 | 9.247 9470 | 1171 | 9.254 8580 | 1209  | 0.745 1420 | 9.993 0890 | 38 | 20 |    |
|    | 50 | 9.248 0641 | 1170 | 9.254 9789 | 1208  | 0.745 0211 | 9.993 0852 | 38 | 10 |    |
| 12 | o  | 9.248 1811 | 1170 | 9.255 0997 | 1208  | 0.744 9003 | 9.993 0814 | 38 | o  | 48 |
|    | 10 | 9.248 2981 | 1170 | 9.255 2205 | 1208  | 0.744 7795 | 9.993 0776 | 38 | 50 |    |
|    | 20 | 9.248 4151 | 1170 | 9.255 3413 | 1207  | 0.744 6587 | 9.993 0738 | 37 | 40 |    |
|    | 30 | 9.248 5321 | 1169 | 9.255 4620 | 1207  | 0.744 5380 | 9.993 0701 | 38 | 30 |    |
|    | 40 | 9.248 6490 | 1168 | 9.255 5827 | 1207  | 0.744 4173 | 9.993 0663 | 38 | 20 |    |
|    | 50 | 9.248 7658 | 1169 | 9.255 7034 | 1206  | 0.744 2966 | 9.993 0625 | 38 | 10 |    |
| 13 | o  | 9.248 8827 | 1168 | 9.255 8240 | 1206  | 0.744 1760 | 9.993 0587 | 38 | o  | 47 |
|    | 10 | 9.248 9995 | 1168 | 9.255 9446 | 1206  | 0.744 0554 | 9.993 0549 | 38 | 50 |    |
|    | 20 | 9.249 1163 | 1167 | 9.256 0652 | 1205  | 0.743 9348 | 9.993 0511 | 38 | 40 |    |
|    | 30 | 9.249 2330 | 1167 | 9.256 1857 | 1205  | 0.743 8143 | 9.993 0473 | 38 | 30 |    |
|    | 40 | 9.249 3497 | 1167 | 9.256 3062 | 1205  | 0.743 6938 | 9.993 0435 | 38 | 20 |    |
|    | 50 | 9.249 4664 | 1166 | 9.256 4267 | 1205  | 0.743 5733 | 9.993 0397 | 38 | 10 |    |
| 14 | o  | 9.249 5830 | 1167 | 9.256 5472 | 1204  | 0.743 4528 | 9.993 0359 | 38 | o  | 46 |
|    | 10 | 9.249 6997 | 1165 | 9.256 6676 | 1204  | 0.743 3324 | 9.993 0321 | 38 | 50 |    |
|    | 20 | 9.249 8162 | 1166 | 9.256 7880 | 1203  | 0.743 2120 | 9.993 0283 | 38 | 40 |    |
|    | 30 | 9.249 9328 | 1165 | 9.256 9083 | 1203  | 0.743 0917 | 9.993 0245 | 38 | 30 |    |
|    | 40 | 9.250 0493 | 1165 | 9.257 0286 | 1203  | 0.742 9714 | 9.993 0207 | 38 | 20 |    |
|    | 50 | 9.250 1658 | 1164 | 9.257 1489 | 1203  | 0.742 8511 | 9.993 0169 | 38 | 10 |    |
| 15 | o  | 9.250 2822 | 1165 | 9.257 2692 | 1202  | 0.742 7308 | 9.993 0131 | 38 | o  | 45 |
|    | 10 | 9.250 3987 | 1163 | 9.257 3894 | 1202  | 0.742 6106 | 9.993 0093 | 39 | 50 |    |
|    | 20 | 9.250 5150 | 1164 | 9.257 5096 | 1202  | 0.742 4904 | 9.993 0054 | 38 | 40 |    |
|    | 30 | 9.250 6314 | 1163 | 9.257 6298 | 1201  | 0.742 3702 | 9.993 0016 | 38 | 30 |    |
|    | 40 | 9.250 7477 | 1163 | 9.257 7499 | 1201  | 0.742 2501 | 9.992 9978 | 38 | 20 |    |
|    | 50 | 9.250 8640 | 1163 | 9.257 8700 | 1201  | 0.742 1300 | 9.992 9940 | 38 | 10 |    |
| 16 | o  | 9.250 9803 | 1162 | 9.257 9901 | 1200  | 0.742 0099 | 9.992 9902 | 38 | o  | 44 |
|    | 10 | 9.251 0965 | 1162 | 9.258 1101 | 1200  | 0.741 8899 | 9.992 9864 | 38 | 50 |    |
|    | 20 | 9.251 2127 | 1162 | 9.258 2301 | 1200  | 0.741 7699 | 9.992 9826 | 38 | 40 |    |
|    | 30 | 9.251 3289 | 1161 | 9.258 3501 | 1200  | 0.741 6499 | 9.992 9788 | 39 | 30 |    |
|    | 40 | 9.251 4450 | 1161 | 9.258 4701 | 1199  | 0.741 5299 | 9.992 9749 | 38 | 20 |    |
|    | 50 | 9.251 5611 | 1161 | 9.258 5900 | 1199  | 0.741 4100 | 9.992 9711 | 38 | 10 |    |
| 17 | o  | 9.251 6772 | 1160 | 9.258 7099 | 1198  | 0.741 2901 | 9.992 9673 | 38 | o  | 43 |
|    | 10 | 9.251 7932 | 1160 | 9.258 8297 | 1198  | 0.741 1703 | 9.992 9635 | 38 | 50 |    |
|    | 20 | 9.251 9092 | 1160 | 9.258 9495 | 1198  | 0.741 0505 | 9.992 9597 | 39 | 40 |    |
|    | 30 | 9.252 0252 | 1159 | 9.259 0693 | 1198  | 0.740 9307 | 9.992 9558 | 38 | 30 |    |
|    | 40 | 9.252 1411 | 1159 | 9.259 1891 | 1197  | 0.740 8109 | 9.992 9520 | 38 | 20 |    |
|    | 50 | 9.252 2570 | 1159 | 9.259 3088 | 1197  | 0.740 6912 | 9.992 9482 | 38 | 10 |    |
| 18 | o  | 9.252 3729 | 1158 | 9.259 4285 | 1197  | 0.740 5715 | 9.992 9444 | 39 | o  | 42 |
|    | 10 | 9.252 4887 | 1158 | 9.259 5482 | 1196  | 0.740 4518 | 9.992 9405 | 38 | 50 |    |
|    | 20 | 9.252 6045 | 1158 | 9.259 6678 | 1197  | 0.740 3322 | 9.992 9367 | 39 | 40 |    |
|    | 30 | 9.252 7203 | 1158 | 9.259 7875 | 1195  | 0.740 2125 | 9.992 9329 | 39 | 30 |    |
|    | 40 | 9.252 8361 | 1157 | 9.259 9070 | 1196  | 0.740 0930 | 9.992 9290 | 38 | 20 |    |
|    | 50 | 9.252 9518 | 1157 | 9.260 0266 | 1195  | 0.739 9734 | 9.992 9252 | 38 | 10 |    |
| 19 | o  | 9.253 0675 | 1156 | 9.260 1461 | 1195  | 0.739 8539 | 9.992 9214 | 39 | o  | 41 |
|    | 10 | 9.253 1831 | 1156 | 9.260 2656 | 1194  | 0.739 7344 | 9.992 9175 | 39 | 50 |    |
|    | 20 | 9.253 2987 | 1156 | 9.260 3850 | 1195  | 0.739 6150 | 9.992 9137 | 38 | 40 |    |
|    | 30 | 9.253 4143 | 1156 | 9.260 5045 | 1194  | 0.739 4955 | 9.992 9099 | 39 | 30 |    |
|    | 40 | 9.253 5299 | 1155 | 9.260 6239 | 1193  | 0.739 3761 | 9.992 9060 | 38 | 20 |    |
|    | 50 | 9.253 6454 | 1155 | 9.260 7432 | 1193  | 0.739 2568 | 9.992 9022 | 38 | 10 |    |
| 20 | o  | 9.253 7609 | 1155 | 9.260 8625 | 1193  | 0.739 1375 | 9.992 8984 | 38 | o  | 40 |

1190  
1 119  
2 238  
3 357  
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5 595  
6 714  
7 833  
8 952  
9 1071

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1 118  
2 236  
3 354  
4 472  
5 590  
6 708  
7 826  
8 944  
9 1062

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2 234  
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4 468  
5 585  
6 702  
7 819  
8 936  
9 1053

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4 464  
5 580  
6 696  
7 812  
8 928  
9 1044

38  
1 38  
2 76  
3 114  
4 152  
5 190  
6 228  
7 266  
8 304  
9 342

80  
1 80  
2 160  
3 240  
4 320  
5 400  
6 480  
7 560  
8 640  
9 720



1100  
1 119  
2 118  
3 117  
4 116  
5 115  
6 114  
7 113  
8 112  
9 111

1180  
1 118  
2 117  
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7 112  
8 111  
9 110

1170  
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1140  
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9 106

|  |    | sin        | d.   | Tang       | d. c. | Cotg       | Coa        | d. |    |    |
|--|----|------------|------|------------|-------|------------|------------|----|----|----|
|  | 20 | 0.353 9609 | 1165 | 0.360 3605 | 1101  | 0.340 1375 | 0.943 8901 | 19 | 0  | 40 |
|  | 10 | 0.353 8764 | 1154 | 0.360 4048 | 1101  | 0.340 1375 | 0.943 8901 | 18 | 50 |    |
|  | 20 | 0.353 9918 | 1153 | 0.360 4491 | 1101  | 0.340 1375 | 0.943 8901 | 17 | 40 |    |
|  | 30 | 0.354 1072 | 1153 | 0.360 4934 | 1101  | 0.340 1375 | 0.943 8901 | 16 | 30 |    |
|  | 40 | 0.354 1226 | 1153 | 0.360 5377 | 1101  | 0.340 1375 | 0.943 8901 | 15 | 20 |    |
|  | 50 | 0.354 1379 | 1153 | 0.360 5820 | 1101  | 0.340 1375 | 0.943 8901 | 14 | 10 |    |
|  | 0  | 0.354 4513 | 1153 | 0.361 5779 | 1101  | 0.340 1375 | 0.943 8901 | 13 | 0  | 30 |
|  | 10 | 0.354 5685 | 1153 | 0.361 6970 | 1101  | 0.340 1375 | 0.943 8901 | 12 | 50 |    |
|  | 20 | 0.354 6847 | 1153 | 0.361 8160 | 1101  | 0.340 1375 | 0.943 8901 | 11 | 40 |    |
|  | 30 | 0.354 7989 | 1153 | 0.361 9350 | 1101  | 0.340 1375 | 0.943 8901 | 10 | 30 |    |
|  | 40 | 0.354 9131 | 1153 | 0.362 0540 | 1101  | 0.340 1375 | 0.943 8901 | 9  | 20 |    |
|  | 50 | 0.355 0292 | 1153 | 0.362 1730 | 1101  | 0.340 1375 | 0.943 8901 | 8  | 10 |    |
|  | 0  | 0.355 1444 | 1150 | 0.362 2920 | 1101  | 0.340 1375 | 0.943 8901 | 7  | 0  | 38 |
|  | 10 | 0.355 2596 | 1151 | 0.362 4110 | 1101  | 0.340 1375 | 0.943 8901 | 6  | 50 |    |
|  | 20 | 0.355 3748 | 1151 | 0.362 5300 | 1101  | 0.340 1375 | 0.943 8901 | 5  | 40 |    |
|  | 30 | 0.355 4899 | 1151 | 0.362 6490 | 1101  | 0.340 1375 | 0.943 8901 | 4  | 30 |    |
|  | 40 | 0.355 6051 | 1151 | 0.362 7680 | 1101  | 0.340 1375 | 0.943 8901 | 3  | 20 |    |
|  | 50 | 0.355 7202 | 1149 | 0.362 8870 | 1101  | 0.340 1375 | 0.943 8901 | 2  | 10 |    |
|  | 0  | 0.355 8354 | 1149 | 0.362 9060 | 1101  | 0.340 1375 | 0.943 8901 | 1  | 0  | 37 |
|  | 10 | 0.355 9505 | 1148 | 0.363 0250 | 1101  | 0.340 1375 | 0.943 8901 | 0  | 50 |    |
|  | 20 | 0.356 0657 | 1148 | 0.363 1440 | 1101  | 0.340 1375 | 0.943 8901 | 0  | 40 |    |
|  | 30 | 0.356 1808 | 1148 | 0.363 2630 | 1101  | 0.340 1375 | 0.943 8901 | 0  | 30 |    |
|  | 40 | 0.356 2959 | 1147 | 0.363 3820 | 1101  | 0.340 1375 | 0.943 8901 | 0  | 20 |    |
|  | 50 | 0.356 4110 | 1146 | 0.363 5010 | 1101  | 0.340 1375 | 0.943 8901 | 0  | 10 |    |
|  | 0  | 0.356 5261 | 1146 | 0.363 6200 | 1101  | 0.340 1375 | 0.943 8901 | 0  | 0  | 36 |
|  | 10 | 0.356 6412 | 1147 | 0.363 7390 | 1101  | 0.340 1375 | 0.943 8901 | 0  | 50 |    |
|  | 20 | 0.356 7563 | 1146 | 0.363 8580 | 1101  | 0.340 1375 | 0.943 8901 | 0  | 40 |    |
|  | 30 | 0.356 8714 | 1146 | 0.363 9770 | 1101  | 0.340 1375 | 0.943 8901 | 0  | 30 |    |
|  | 40 | 0.356 9865 | 1146 | 0.364 0960 | 1101  | 0.340 1375 | 0.943 8901 | 0  | 20 |    |
|  | 50 | 0.357 1016 | 1145 | 0.364 2150 | 1101  | 0.340 1375 | 0.943 8901 | 0  | 10 |    |
|  | 0  | 0.357 2167 | 1145 | 0.364 3340 | 1101  | 0.340 1375 | 0.943 8901 | 0  | 0  | 35 |
|  | 10 | 0.357 3318 | 1145 | 0.364 4530 | 1101  | 0.340 1375 | 0.943 8901 | 0  | 50 |    |
|  | 20 | 0.357 4469 | 1145 | 0.364 5720 | 1101  | 0.340 1375 | 0.943 8901 | 0  | 40 |    |
|  | 30 | 0.357 5620 | 1145 | 0.364 6910 | 1101  | 0.340 1375 | 0.943 8901 | 0  | 30 |    |
|  | 40 | 0.357 6771 | 1145 | 0.364 8100 | 1101  | 0.340 1375 | 0.943 8901 | 0  | 20 |    |
|  | 50 | 0.357 7922 | 1144 | 0.364 9290 | 1101  | 0.340 1375 | 0.943 8901 | 0  | 10 |    |
|  | 0  | 0.358 0073 | 1144 | 0.365 0480 | 1101  | 0.340 1375 | 0.943 8901 | 0  | 0  | 34 |
|  | 10 | 0.358 1224 | 1144 | 0.365 1670 | 1101  | 0.340 1375 | 0.943 8901 | 0  | 50 |    |
|  | 20 | 0.358 2375 | 1144 | 0.365 2860 | 1101  | 0.340 1375 | 0.943 8901 | 0  | 40 |    |
|  | 30 | 0.358 3526 | 1144 | 0.365 4050 | 1101  | 0.340 1375 | 0.943 8901 | 0  | 30 |    |
|  | 40 | 0.358 4677 | 1144 | 0.365 5240 | 1101  | 0.340 1375 | 0.943 8901 | 0  | 20 |    |
|  | 50 | 0.358 5828 | 1143 | 0.365 6430 | 1101  | 0.340 1375 | 0.943 8901 | 0  | 10 |    |
|  | 0  | 0.358 6979 | 1143 | 0.365 7620 | 1101  | 0.340 1375 | 0.943 8901 | 0  | 0  | 33 |
|  | 10 | 0.358 8130 | 1143 | 0.365 8810 | 1101  | 0.340 1375 | 0.943 8901 | 0  | 50 |    |
|  | 20 | 0.358 9281 | 1143 | 0.366 0000 | 1101  | 0.340 1375 | 0.943 8901 | 0  | 40 |    |
|  | 30 | 0.359 0432 | 1143 | 0.366 1190 | 1101  | 0.340 1375 | 0.943 8901 | 0  | 30 |    |
|  | 40 | 0.359 1583 | 1143 | 0.366 2380 | 1101  | 0.340 1375 | 0.943 8901 | 0  | 20 |    |
|  | 50 | 0.359 2734 | 1143 | 0.366 3570 | 1101  | 0.340 1375 | 0.943 8901 | 0  | 10 |    |
|  | 0  | 0.359 3885 | 1142 | 0.366 4760 | 1101  | 0.340 1375 | 0.943 8901 | 0  | 0  | 32 |
|  | 10 | 0.359 5036 | 1142 | 0.366 5950 | 1101  | 0.340 1375 | 0.943 8901 | 0  | 50 |    |
|  | 20 | 0.359 6187 | 1142 | 0.366 7140 | 1101  | 0.340 1375 | 0.943 8901 | 0  | 40 |    |
|  | 30 | 0.359 7338 | 1142 | 0.366 8330 | 1101  | 0.340 1375 | 0.943 8901 | 0  | 30 |    |
|  | 40 | 0.359 8489 | 1142 | 0.366 9520 | 1101  | 0.340 1375 | 0.943 8901 | 0  | 20 |    |
|  | 50 | 0.359 9640 | 1142 | 0.367 0710 | 1101  | 0.340 1375 | 0.943 8901 | 0  | 10 |    |
|  | 0  | 0.360 0791 | 1141 | 0.367 1900 | 1101  | 0.340 1375 | 0.943 8901 | 0  | 0  | 31 |
|  | 10 | 0.360 1942 | 1141 | 0.367 3090 | 1101  | 0.340 1375 | 0.943 8901 | 0  | 50 |    |
|  | 20 | 0.360 3093 | 1141 | 0.367 4280 | 1101  | 0.340 1375 | 0.943 8901 | 0  | 40 |    |
|  | 30 | 0.360 4244 | 1141 | 0.367 5470 | 1101  | 0.340 1375 | 0.943 8901 | 0  | 30 |    |
|  | 40 | 0.360 5395 | 1141 | 0.367 6660 | 1101  | 0.340 1375 | 0.943 8901 | 0  | 20 |    |
|  | 50 | 0.360 6546 | 1141 | 0.367 7850 | 1101  | 0.340 1375 | 0.943 8901 | 0  | 10 |    |
|  | 0  | 0.360 7697 | 1141 | 0.367 9040 | 1101  | 0.340 1375 | 0.943 8901 | 0  | 0  | 30 |



| i  | n  | Slu        | d.   | Tang       | d. e. | Gotg       | Con        | d. | n  | i  |
|----|----|------------|------|------------|-------|------------|------------|----|----|----|
| 30 | 0  | 9.260 6330 | 1136 | 9.267 9669 | 1175  | 0.732 0331 | 9.992 6661 | 39 | 0  | 30 |
|    | 10 | 9.260 7366 | 1136 | 9.268 0844 | 1175  | 0.731 9156 | 9.992 6622 | 39 | 50 |    |
|    | 20 | 9.260 8602 | 1135 | 9.268 2019 | 1174  | 0.731 7981 | 9.992 6583 | 39 | 40 |    |
|    | 30 | 9.260 9737 | 1135 | 9.268 3193 | 1174  | 0.731 6807 | 9.992 6544 | 39 | 30 |    |
|    | 40 | 9.261 0872 | 1135 | 9.268 4367 | 1174  | 0.731 5633 | 9.992 6505 | 39 | 20 |    |
|    | 50 | 9.261 2007 | 1134 | 9.268 5541 | 1173  | 0.731 4459 | 9.992 6466 | 39 | 10 |    |
| 31 | 0  | 9.261 3141 | 1134 | 9.268 6714 | 1173  | 0.731 3286 | 9.992 6427 | 39 | 0  | 29 |
|    | 10 | 9.261 4275 | 1134 | 9.268 7887 | 1173  | 0.731 2113 | 9.992 6388 | 39 | 50 |    |
|    | 20 | 9.261 5409 | 1133 | 9.268 9060 | 1173  | 0.731 0940 | 9.992 6349 | 39 | 40 |    |
|    | 30 | 9.261 6542 | 1133 | 9.269 0233 | 1172  | 0.730 9767 | 9.992 6310 | 39 | 30 |    |
|    | 40 | 9.261 7675 | 1133 | 9.269 1405 | 1172  | 0.730 8595 | 9.992 6270 | 39 | 20 |    |
|    | 50 | 9.261 8808 | 1133 | 9.269 2577 | 1172  | 0.730 7423 | 9.992 6231 | 39 | 10 |    |
| 32 | 0  | 9.261 9941 | 1132 | 9.269 3749 | 1171  | 0.730 6251 | 9.992 6192 | 39 | 0  | 28 |
|    | 10 | 9.262 1073 | 1132 | 9.269 4920 | 1171  | 0.730 5080 | 9.992 6153 | 39 | 50 |    |
|    | 20 | 9.262 2205 | 1131 | 9.269 6091 | 1171  | 0.730 3909 | 9.992 6114 | 39 | 40 |    |
|    | 30 | 9.262 3336 | 1132 | 9.269 7262 | 1170  | 0.730 2738 | 9.992 6075 | 39 | 30 |    |
|    | 40 | 9.262 4468 | 1131 | 9.269 8432 | 1170  | 0.730 1568 | 9.992 6035 | 39 | 20 |    |
|    | 50 | 9.262 5599 | 1130 | 9.269 9602 | 1170  | 0.730 0398 | 9.992 5996 | 39 | 10 |    |
| 33 | 0  | 9.262 6729 | 1131 | 9.270 0772 | 1170  | 0.729 9228 | 9.992 5957 | 39 | 0  | 27 |
|    | 10 | 9.262 7860 | 1130 | 9.270 1942 | 1169  | 0.729 8058 | 9.992 5918 | 39 | 50 |    |
|    | 20 | 9.262 8990 | 1130 | 9.270 3111 | 1169  | 0.729 6889 | 9.992 5879 | 39 | 40 |    |
|    | 30 | 9.263 0120 | 1129 | 9.270 4280 | 1169  | 0.729 5720 | 9.992 5839 | 39 | 30 |    |
|    | 40 | 9.263 1249 | 1129 | 9.270 5449 | 1168  | 0.729 4551 | 9.992 5800 | 39 | 20 |    |
|    | 50 | 9.263 2378 | 1129 | 9.270 6617 | 1169  | 0.729 3383 | 9.992 5761 | 39 | 10 |    |
| 34 | 0  | 9.263 3507 | 1129 | 9.270 7786 | 1167  | 0.729 2214 | 9.992 5722 | 40 | 0  | 26 |
|    | 10 | 9.263 4636 | 1128 | 9.270 8953 | 1168  | 0.729 1047 | 9.992 5682 | 39 | 50 |    |
|    | 20 | 9.263 5764 | 1128 | 9.271 0121 | 1167  | 0.728 9879 | 9.992 5643 | 39 | 40 |    |
|    | 30 | 9.263 6892 | 1128 | 9.271 1288 | 1167  | 0.728 8712 | 9.992 5604 | 40 | 30 |    |
|    | 40 | 9.263 8020 | 1127 | 9.271 2455 | 1167  | 0.728 7545 | 9.992 5564 | 39 | 20 |    |
|    | 50 | 9.263 9147 | 1127 | 9.271 3622 | 1166  | 0.728 6378 | 9.992 5525 | 39 | 10 |    |
| 35 | 0  | 9.264 0274 | 1127 | 9.271 4788 | 1166  | 0.728 5212 | 9.992 5486 | 40 | 0  | 25 |
|    | 10 | 9.264 1401 | 1126 | 9.271 5954 | 1166  | 0.728 4046 | 9.992 5446 | 39 | 50 |    |
|    | 20 | 9.264 2527 | 1126 | 9.271 7121 | 1166  | 0.728 2880 | 9.992 5407 | 39 | 40 |    |
|    | 30 | 9.264 3653 | 1126 | 9.271 8286 | 1165  | 0.728 1714 | 9.992 5368 | 40 | 30 |    |
|    | 40 | 9.264 4779 | 1126 | 9.271 9451 | 1165  | 0.728 0549 | 9.992 5328 | 39 | 20 |    |
|    | 50 | 9.264 5905 | 1125 | 9.272 0616 | 1164  | 0.727 9384 | 9.992 5289 | 39 | 10 |    |
| 36 | 0  | 9.264 7030 | 1125 | 9.272 1780 | 1165  | 0.727 8220 | 9.992 5250 | 39 | 0  | 24 |
|    | 10 | 9.264 8155 | 1124 | 9.272 2945 | 1164  | 0.727 7055 | 9.992 5210 | 40 | 50 |    |
|    | 20 | 9.264 9279 | 1125 | 9.272 4109 | 1163  | 0.727 5891 | 9.992 5171 | 40 | 40 |    |
|    | 30 | 9.265 0403 | 1124 | 9.272 5272 | 1163  | 0.727 4728 | 9.992 5131 | 39 | 30 |    |
|    | 40 | 9.265 1528 | 1123 | 9.272 6436 | 1163  | 0.727 3564 | 9.992 5092 | 39 | 20 |    |
|    | 50 | 9.265 2651 | 1124 | 9.272 7599 | 1163  | 0.727 2401 | 9.992 5052 | 39 | 10 |    |
| 37 | 0  | 9.265 3775 | 1123 | 9.272 8762 | 1162  | 0.727 1238 | 9.992 5013 | 40 | 0  | 23 |
|    | 10 | 9.265 4898 | 1123 | 9.272 9924 | 1163  | 0.727 0076 | 9.992 4973 | 39 | 50 |    |
|    | 20 | 9.265 6021 | 1122 | 9.273 1087 | 1162  | 0.726 8913 | 9.992 4934 | 40 | 40 |    |
|    | 30 | 9.265 7143 | 1122 | 9.273 2249 | 1162  | 0.726 7751 | 9.992 4894 | 39 | 30 |    |
|    | 40 | 9.265 8265 | 1122 | 9.273 3411 | 1161  | 0.726 6589 | 9.992 4855 | 39 | 20 |    |
|    | 50 | 9.265 9387 | 1122 | 9.273 4572 | 1161  | 0.726 5428 | 9.992 4815 | 39 | 10 |    |
| 38 | 0  | 9.266 0509 | 1121 | 9.273 5733 | 1161  | 0.726 4267 | 9.992 4776 | 40 | 0  | 22 |
|    | 10 | 9.266 1630 | 1121 | 9.273 6894 | 1161  | 0.726 3106 | 9.992 4736 | 39 | 50 |    |
|    | 20 | 9.266 2751 | 1121 | 9.273 8055 | 1160  | 0.726 1945 | 9.992 4697 | 40 | 40 |    |
|    | 30 | 9.266 3872 | 1120 | 9.273 9215 | 1160  | 0.726 0785 | 9.992 4657 | 39 | 30 |    |
|    | 40 | 9.266 4992 | 1121 | 9.274 0375 | 1159  | 0.725 9625 | 9.992 4618 | 40 | 20 |    |
|    | 50 | 9.266 6113 | 1119 | 9.274 1534 | 1160  | 0.725 8466 | 9.992 4578 | 39 | 10 |    |
| 39 | 0  | 9.266 7233 | 1120 | 9.274 2693 | 1159  | 0.725 7306 | 9.992 4539 | 40 | 0  | 21 |
|    | 10 | 9.266 8352 | 1119 | 9.274 3853 | 1159  | 0.725 6147 | 9.992 4499 | 40 | 50 |    |
|    | 20 | 9.266 9471 | 1119 | 9.274 5012 | 1158  | 0.725 4988 | 9.992 4459 | 39 | 40 |    |
|    | 30 | 9.267 0590 | 1119 | 9.274 6170 | 1159  | 0.725 3830 | 9.992 4419 | 40 | 30 |    |
|    | 40 | 9.267 1709 | 1118 | 9.274 7329 | 1158  | 0.725 2671 | 9.992 4380 | 40 | 20 |    |
|    | 50 | 9.267 2827 | 1118 | 9.274 8487 | 1157  | 0.725 1513 | 9.992 4340 | 39 | 10 |    |
| 40 | 0  | 9.267 3945 |      | 9.274 9644 |       | 0.725 0356 | 9.992 4301 |    | 0  | 20 |
| i  | n  | Con        | d.   | Gotg       | d. e. | Tang       | Slu        | d. | n  | i  |

|      |      |      |
|------|------|------|
| 1180 | 1    | 115  |
| 2    | 230  |      |
| 3    | 345  |      |
| 4    | 460  |      |
| 5    | 575  |      |
| 6    | 690  |      |
| 7    | 805  |      |
| 8    | 920  |      |
| 9    | 1035 |      |
| 1140 | 1    | 114  |
| 2    | 228  |      |
| 3    | 341  |      |
| 4    | 456  |      |
| 5    | 570  |      |
| 6    | 684  |      |
| 7    | 798  |      |
| 8    | 912  |      |
| 9    | 1026 |      |
| 1190 | 1    | 113  |
| 2    | 226  |      |
| 3    | 339  |      |
| 4    | 452  |      |
| 5    | 565  |      |
| 6    | 678  |      |
| 7    | 791  |      |
| 8    | 904  |      |
| 9    | 1017 |      |
| 1120 | 1    | 111  |
| 2    | 224  |      |
| 3    | 336  |      |
| 4    | 448  |      |
| 5    | 560  |      |
| 6    | 671  |      |
| 7    | 781  |      |
| 8    | 892  |      |
| 9    | 1003 |      |
| 30   | 1    | 3-2  |
| 2    | 2    | 7-4  |
| 3    | 3    | 11-7 |
| 4    | 4    | 15-6 |
| 5    | 5    | 19-5 |
| 6    | 6    | 23-4 |
| 7    | 7    | 27-3 |
| 8    | 8    | 31-2 |
| 9    | 9    | 35-1 |
| 40   | 1    | 4-0  |
| 2    | 2    | 8-0  |
| 3    | 3    | 12-0 |
| 4    | 4    | 16-0 |
| 5    | 5    | 20-0 |
| 6    | 6    | 24-0 |
| 7    | 7    | 28-0 |
| 8    | 8    | 32-0 |
| 9    | 9    | 36-0 |







|    | "  | Sin        | d.   | Tang       | d. c. | Cotg       | Cos        | d. | "  |      |
|----|----|------------|------|------------|-------|------------|------------|----|----|------|
| 50 | 0  | 9.274 0487 | 1100 | 9.281 8585 | 1140  | 0.718 1415 | 9.992 1902 | 40 | 0  | 10   |
|    | 10 | 9.274 1587 | 1100 | 9.281 9725 | 1140  | 0.718 0275 | 9.992 1862 | 40 | 50 | 1110 |
|    | 20 | 9.274 2687 | 1099 | 9.282 0865 | 1140  | 0.717 9135 | 9.992 1822 | 41 | 40 | 1111 |
|    | 30 | 9.274 3786 | 1100 | 9.282 2005 | 1140  | 0.717 7995 | 9.992 1781 | 41 | 30 | 2122 |
|    | 40 | 9.274 4886 | 1099 | 9.282 3145 | 1139  | 0.717 6855 | 9.992 1741 | 40 | 20 | 3333 |
|    | 50 | 9.274 5985 | 1098 | 9.282 4284 | 1139  | 0.717 5716 | 9.992 1701 | 40 | 10 | 4444 |
| 51 | 0  | 9.274 7083 | 1099 | 9.282 5423 | 1139  | 0.717 4577 | 9.992 1660 | 41 | 0  | 5555 |
|    | 10 | 9.274 8182 | 1098 | 9.282 6562 | 1138  | 0.717 3438 | 9.992 1620 | 40 | 50 | 6666 |
|    | 20 | 9.274 9280 | 1098 | 9.282 7700 | 1138  | 0.717 2300 | 9.992 1580 | 41 | 40 | 7777 |
|    | 30 | 9.275 0378 | 1097 | 9.282 8838 | 1138  | 0.717 1162 | 9.992 1539 | 41 | 30 | 8888 |
|    | 40 | 9.275 1475 | 1098 | 9.282 9976 | 1138  | 0.717 0024 | 9.992 1499 | 41 | 20 | 9999 |
|    | 50 | 9.275 2573 | 1096 | 9.283 1114 | 1137  | 0.716 8886 | 9.992 1458 | 40 | 10 |      |
| 52 | 0  | 9.275 3669 | 1097 | 9.283 2251 | 1137  | 0.716 7749 | 9.992 1418 | 40 | 0  | 8    |
|    | 10 | 9.275 4766 | 1097 | 9.283 3388 | 1137  | 0.716 6612 | 9.992 1378 | 41 | 50 | 1100 |
|    | 20 | 9.275 5863 | 1096 | 9.283 4525 | 1137  | 0.716 5475 | 9.992 1337 | 41 | 40 | 1110 |
|    | 30 | 9.275 6959 | 1095 | 9.283 5662 | 1136  | 0.716 4338 | 9.992 1297 | 41 | 30 | 2122 |
|    | 40 | 9.275 8054 | 1096 | 9.283 6798 | 1136  | 0.716 3202 | 9.992 1256 | 41 | 20 | 3333 |
|    | 50 | 9.275 9150 | 1095 | 9.283 7934 | 1136  | 0.716 2066 | 9.992 1216 | 41 | 10 | 4444 |
| 53 | 0  | 9.276 0245 | 1095 | 9.284 0205 | 1135  | 0.715 9795 | 9.992 1175 | 40 | 0  | 7    |
|    | 10 | 9.276 1340 | 1095 | 9.284 1340 | 1135  | 0.715 8660 | 9.992 1135 | 41 | 50 | 1090 |
|    | 20 | 9.276 2435 | 1094 | 9.284 2475 | 1135  | 0.715 7525 | 9.992 1094 | 41 | 40 | 1109 |
|    | 30 | 9.276 3529 | 1094 | 9.284 3610 | 1135  | 0.715 6390 | 9.992 1054 | 41 | 30 | 2118 |
|    | 40 | 9.276 4623 | 1094 | 9.284 4744 | 1134  | 0.715 5256 | 9.992 1013 | 41 | 20 | 3327 |
|    | 50 | 9.276 5717 | 1094 | 9.284 5878 | 1134  | 0.715 4122 | 9.992 0973 | 41 | 10 | 4436 |
| 54 | 0  | 9.276 6811 | 1093 | 9.284 7012 | 1134  | 0.715 2988 | 9.992 0932 | 40 | 0  | 5    |
|    | 10 | 9.276 7904 | 1093 | 9.284 8146 | 1133  | 0.715 1854 | 9.992 0892 | 41 | 50 | 1080 |
|    | 20 | 9.276 8997 | 1092 | 9.284 9279 | 1133  | 0.715 0721 | 9.992 0851 | 41 | 40 | 1108 |
|    | 30 | 9.277 0089 | 1093 | 9.285 0412 | 1133  | 0.714 9588 | 9.992 0811 | 41 | 30 | 2116 |
|    | 40 | 9.277 1182 | 1092 | 9.285 1545 | 1132  | 0.714 8455 | 9.992 0770 | 41 | 20 | 3324 |
|    | 50 | 9.277 2274 | 1092 | 9.285 2677 | 1132  | 0.714 7323 | 9.992 0729 | 40 | 10 | 4432 |
| 55 | 0  | 9.277 3366 | 1091 | 9.285 3809 | 1132  | 0.714 6191 | 9.992 0689 | 41 | 0  | 5    |
|    | 10 | 9.277 4457 | 1092 | 9.285 4941 | 1132  | 0.714 5059 | 9.992 0648 | 41 | 50 | 1080 |
|    | 20 | 9.277 5549 | 1091 | 9.285 6073 | 1131  | 0.714 3927 | 9.992 0608 | 41 | 40 | 1108 |
|    | 30 | 9.277 6640 | 1090 | 9.285 7204 | 1131  | 0.714 2796 | 9.992 0567 | 41 | 30 | 2116 |
|    | 40 | 9.277 7730 | 1091 | 9.285 8335 | 1131  | 0.714 1665 | 9.992 0526 | 41 | 20 | 3324 |
|    | 50 | 9.277 8821 | 1090 | 9.285 9466 | 1130  | 0.714 0534 | 9.992 0486 | 41 | 10 | 4432 |
| 56 | 0  | 9.277 9911 | 1090 | 9.286 0596 | 1130  | 0.713 9404 | 9.992 0445 | 41 | 0  | 4    |
|    | 10 | 9.278 1001 | 1089 | 9.286 1726 | 1130  | 0.713 8274 | 9.992 0404 | 40 | 50 | 1080 |
|    | 20 | 9.278 2090 | 1089 | 9.286 2856 | 1130  | 0.713 7144 | 9.992 0364 | 41 | 40 | 1108 |
|    | 30 | 9.278 3179 | 1089 | 9.286 3986 | 1129  | 0.713 6014 | 9.992 0323 | 41 | 30 | 2116 |
|    | 40 | 9.278 4268 | 1089 | 9.286 5115 | 1129  | 0.713 4885 | 9.992 0282 | 41 | 20 | 3324 |
|    | 50 | 9.278 5357 | 1088 | 9.286 6245 | 1128  | 0.713 3755 | 9.992 0241 | 40 | 10 | 4432 |
| 57 | 0  | 9.278 6445 | 1088 | 9.286 7373 | 1128  | 0.713 2627 | 9.992 0201 | 41 | 0  | 3    |
|    | 10 | 9.278 7533 | 1088 | 9.286 8502 | 1128  | 0.713 1498 | 9.992 0160 | 41 | 50 | 1080 |
|    | 20 | 9.278 8621 | 1088 | 9.286 9630 | 1128  | 0.713 0370 | 9.992 0119 | 41 | 40 | 1108 |
|    | 30 | 9.278 9709 | 1087 | 9.287 0758 | 1128  | 0.712 9242 | 9.992 0078 | 41 | 30 | 2116 |
|    | 40 | 9.279 0796 | 1087 | 9.287 1886 | 1128  | 0.712 8114 | 9.992 0038 | 41 | 20 | 3324 |
|    | 50 | 9.279 1883 | 1087 | 9.287 3014 | 1127  | 0.712 6986 | 9.992 0007 | 41 | 10 | 4432 |
| 58 | 0  | 9.279 2970 | 1086 | 9.287 4141 | 1127  | 0.712 5859 | 9.992 0007 | 41 | 0  | 2    |
|    | 10 | 9.279 4056 | 1086 | 9.287 5268 | 1127  | 0.712 4732 | 9.992 0007 | 40 | 50 | 1080 |
|    | 20 | 9.279 5142 | 1086 | 9.287 6395 | 1126  | 0.712 3605 | 9.992 0007 | 41 | 40 | 1108 |
|    | 30 | 9.279 6228 | 1086 | 9.287 7521 | 1126  | 0.712 2479 | 9.992 0007 | 41 | 30 | 2116 |
|    | 40 | 9.279 7314 | 1085 | 9.287 8647 | 1126  | 0.712 1353 | 9.992 0007 | 41 | 20 | 3324 |
|    | 50 | 9.279 8399 | 1085 | 9.287 9773 | 1126  | 0.712 0227 | 9.992 0007 | 41 | 10 | 4432 |
| 59 | 0  | 9.279 9484 | 1085 | 9.288 0899 | 1125  | 0.711 9101 | 9.992 0007 | 41 | 0  | 1    |
|    | 10 | 9.280 0569 | 1084 | 9.288 2024 | 1125  | 0.711 7976 | 9.992 0007 | 41 | 50 | 1080 |
|    | 20 | 9.280 1653 | 1085 | 9.288 3149 | 1125  | 0.711 6851 | 9.992 0007 | 41 | 40 | 1108 |
|    | 30 | 9.280 2738 | 1083 | 9.288 4274 | 1124  | 0.711 5726 | 9.992 0007 | 41 | 30 | 2116 |
|    | 40 | 9.280 3821 | 1084 | 9.288 5398 | 1125  | 0.711 4602 | 9.992 0007 | 41 | 20 | 3324 |
|    | 50 | 9.280 4905 | 1083 | 9.288 6523 | 1125  | 0.711 3477 | 9.992 0007 | 41 | 10 | 4432 |
| 60 | 0  | 9.280 5988 |      |            |       |            |            |    | 0  |      |
|    | "  | Cos        | d.   | Cotg       | d. c. | Tang       | Sin        | d. | "  |      |



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| i  | "  | Sin        | d.   | Tang       | d. c. | Cotg       | Cos        | d. | "  | i     |
|----|----|------------|------|------------|-------|------------|------------|----|----|-------|
| 10 | o  | 9.287 0480 | 1067 | 9.295 3489 | 1108  | 0.704 6511 | 9.991 6991 | 42 | o  | 50    |
|    | 10 | 9.287 1547 | 1066 | 9.295 4597 | 1108  | 0.704 5403 | 9.991 6949 | 41 | 50 | 1080  |
|    | 20 | 9.287 2613 | 1066 | 9.295 5705 | 1108  | 0.704 4295 | 9.991 6908 | 42 | 40 | 1 108 |
|    | 30 | 9.287 3679 | 1066 | 9.295 6813 | 1107  | 0.704 3187 | 9.991 6866 | 41 | 30 | 2 216 |
|    | 40 | 9.287 4745 | 1065 | 9.295 7920 | 1107  | 0.704 2080 | 9.991 6825 | 42 | 20 | 3 324 |
|    | 50 | 9.287 5810 | 1065 | 9.295 9027 | 1107  | 0.704 0973 | 9.991 6783 | 42 | 10 | 4 432 |
| 11 | o  | 9.287 6875 | 1065 | 9.296 0134 | 1106  | 0.703 9866 | 9.991 6741 | 41 | o  | 49    |
|    | 10 | 9.287 7940 | 1065 | 9.296 1240 | 1107  | 0.703 8760 | 9.991 6700 | 42 | 50 | 5 540 |
|    | 20 | 9.287 9005 | 1064 | 9.296 2347 | 1106  | 0.703 7653 | 9.991 6658 | 41 | 40 | 6 648 |
|    | 30 | 9.288 0069 | 1064 | 9.296 3453 | 1105  | 0.703 6547 | 9.991 6617 | 42 | 30 | 7 756 |
|    | 40 | 9.288 1133 | 1064 | 9.296 4558 | 1106  | 0.703 5442 | 9.991 6575 | 42 | 20 | 8 864 |
|    | 50 | 9.288 2197 | 1063 | 9.296 5664 | 1105  | 0.703 4336 | 9.991 6533 | 41 | 10 | 9 972 |
| 12 | o  | 9.288 3260 | 1064 | 9.296 6769 | 1105  | 0.703 3231 | 9.991 6492 | 42 | o  | 48    |
|    | 10 | 9.288 4324 | 1063 | 9.296 7874 | 1104  | 0.703 2126 | 9.991 6450 | 42 | 50 | 1070  |
|    | 20 | 9.288 5387 | 1062 | 9.296 8978 | 1105  | 0.703 1022 | 9.991 6408 | 42 | 40 | 1 107 |
|    | 30 | 9.288 6449 | 1063 | 9.297 0083 | 1104  | 0.702 9917 | 9.991 6366 | 42 | 30 | 2 214 |
|    | 40 | 9.288 7512 | 1062 | 9.297 1187 | 1104  | 0.702 8813 | 9.991 6325 | 41 | 20 | 3 321 |
|    | 50 | 9.288 8574 | 1062 | 9.297 2291 | 1104  | 0.702 7709 | 9.991 6283 | 42 | 10 | 4 428 |
| 13 | o  | 9.288 9636 | 1061 | 9.297 3395 | 1103  | 0.702 6605 | 9.991 6241 | 42 | o  | 47    |
|    | 10 | 9.289 0697 | 1062 | 9.297 4498 | 1103  | 0.702 5502 | 9.991 6199 | 41 | 50 | 5 535 |
|    | 20 | 9.289 1759 | 1061 | 9.297 5601 | 1103  | 0.702 4399 | 9.991 6158 | 42 | 40 | 6 642 |
|    | 30 | 9.289 2820 | 1061 | 9.297 6704 | 1102  | 0.702 3296 | 9.991 6116 | 42 | 30 | 7 749 |
|    | 40 | 9.289 3881 | 1060 | 9.297 7806 | 1103  | 0.702 2194 | 9.991 6074 | 42 | 20 | 8 856 |
|    | 50 | 9.289 4941 | 1060 | 9.297 8909 | 1102  | 0.702 1091 | 9.991 6032 | 42 | 10 | 9 963 |
| 14 | o  | 9.289 6001 | 1060 | 9.298 0011 | 1102  | 0.701 9989 | 9.991 5990 | 41 | o  | 46    |
|    | 10 | 9.289 7061 | 1060 | 9.298 1113 | 1101  | 0.701 8887 | 9.991 5949 | 42 | 50 | 1080  |
|    | 20 | 9.289 8121 | 1060 | 9.298 2214 | 1102  | 0.701 7786 | 9.991 5907 | 42 | 40 | 1 106 |
|    | 30 | 9.289 9181 | 1059 | 9.298 3316 | 1101  | 0.701 6684 | 9.991 5865 | 42 | 30 | 2 212 |
|    | 40 | 9.290 0240 | 1059 | 9.298 4417 | 1100  | 0.701 5583 | 9.991 5823 | 42 | 20 | 3 318 |
|    | 50 | 9.290 1299 | 1058 | 9.298 5517 | 1101  | 0.701 4483 | 9.991 5781 | 42 | 10 | 4 424 |
| 15 | o  | 9.290 2357 | 1059 | 9.298 6618 | 1100  | 0.701 3382 | 9.991 5739 | 41 | o  | 45    |
|    | 10 | 9.290 3416 | 1058 | 9.298 7718 | 1100  | 0.701 2282 | 9.991 5698 | 42 | 50 | 5 530 |
|    | 20 | 9.290 4474 | 1058 | 9.298 8818 | 1100  | 0.701 1182 | 9.991 5656 | 42 | 40 | 6 636 |
|    | 30 | 9.290 5532 | 1057 | 9.298 9918 | 1099  | 0.701 0082 | 9.991 5614 | 42 | 30 | 7 742 |
|    | 40 | 9.290 6589 | 1057 | 9.299 1017 | 1100  | 0.700 8983 | 9.991 5572 | 42 | 20 | 8 848 |
|    | 50 | 9.290 7646 | 1058 | 9.299 2117 | 1099  | 0.700 7883 | 9.991 5530 | 42 | 10 | 9 954 |
| 16 | o  | 9.290 8704 | 1056 | 9.299 3216 | 1098  | 0.700 6784 | 9.991 5488 | 42 | o  | 44    |
|    | 10 | 9.290 9760 | 1057 | 9.299 4314 | 1099  | 0.700 5686 | 9.991 5446 | 42 | 50 | 1080  |
|    | 20 | 9.291 0817 | 1056 | 9.299 5413 | 1098  | 0.700 4587 | 9.991 5404 | 42 | 40 | 1 105 |
|    | 30 | 9.291 1873 | 1056 | 9.299 6511 | 1098  | 0.700 3489 | 9.991 5362 | 42 | 30 | 2 210 |
|    | 40 | 9.291 2929 | 1055 | 9.299 7609 | 1098  | 0.700 2391 | 9.991 5320 | 42 | 20 | 3 315 |
|    | 50 | 9.291 3985 | 1055 | 9.299 8707 | 1097  | 0.700 1293 | 9.991 5278 | 42 | 10 | 4 420 |
| 17 | o  | 9.291 5040 | 1055 | 9.299 9804 | 1097  | 0.700 0196 | 9.991 5236 | 42 | o  | 43    |
|    | 10 | 9.291 6095 | 1055 | 9.300 0901 | 1097  | 0.699 9099 | 9.991 5194 | 42 | 50 | 5 525 |
|    | 20 | 9.291 7150 | 1055 | 9.300 1998 | 1097  | 0.699 8002 | 9.991 5152 | 42 | 40 | 6 630 |
|    | 30 | 9.291 8205 | 1054 | 9.300 3095 | 1096  | 0.699 6905 | 9.991 5110 | 42 | 30 | 7 735 |
|    | 40 | 9.291 9259 | 1054 | 9.300 4191 | 1097  | 0.699 5809 | 9.991 5068 | 42 | 20 | 8 840 |
|    | 50 | 9.292 0313 | 1054 | 9.300 5288 | 1095  | 0.699 4712 | 9.991 5026 | 42 | 10 | 9 945 |
| 18 | o  | 9.292 1367 | 1054 | 9.300 6383 | 1096  | 0.699 3617 | 9.991 4984 | 42 | o  | 42    |
|    | 10 | 9.292 2421 | 1053 | 9.300 7479 | 1095  | 0.699 2521 | 9.991 4942 | 42 | 50 | 1080  |
|    | 20 | 9.292 3474 | 1053 | 9.300 8574 | 1096  | 0.699 1426 | 9.991 4900 | 42 | 40 | 1 105 |
|    | 30 | 9.292 4527 | 1053 | 9.300 9670 | 1094  | 0.699 0330 | 9.991 4858 | 43 | 30 | 2 210 |
|    | 40 | 9.292 5580 | 1052 | 9.301 0764 | 1095  | 0.698 9236 | 9.991 4815 | 42 | 20 | 3 315 |
|    | 50 | 9.292 6632 | 1053 | 9.301 1859 | 1095  | 0.698 8141 | 9.991 4773 | 42 | 10 | 4 420 |
| 19 | o  | 9.292 7685 | 1052 | 9.301 2954 | 1094  | 0.698 7046 | 9.991 4731 | 42 | o  | 41    |
|    | 10 | 9.292 8737 | 1051 | 9.301 4048 | 1094  | 0.698 5952 | 9.991 4689 | 42 | 50 | 5 525 |
|    | 20 | 9.292 9788 | 1052 | 9.301 5142 | 1093  | 0.698 4858 | 9.991 4647 | 42 | 40 | 6 630 |
|    | 30 | 9.293 0840 | 1051 | 9.301 6235 | 1093  | 0.698 3765 | 9.991 4605 | 42 | 30 | 7 735 |
|    | 40 | 9.293 1891 | 1051 | 9.301 7328 | 1094  | 0.698 2672 | 9.991 4563 | 43 | 20 | 8 840 |
|    | 50 | 9.293 2942 | 1051 | 9.301 8422 | 1092  | 0.698 1578 | 9.991 4520 | 42 | 10 | 9 945 |
| 20 | o  | 9.293 3993 | 1051 | 9.301 9514 | 1092  | 0.698 0486 | 9.991 4478 | 42 | o  | 40    |
|    |    |            |      |            |       |            |            |    |    |       |
|    | "  | Cos        | d.   | Cotg       | d. c. | Tang       | Sin        | d. | "  | i     |



1000

1 109

2 118

3 127

4 136

5 145

6 154

7 163

8 172

9 181

1080

1 108

2 116

3 124

4 132

5 140

6 148

7 156

8 164

9 172

1070

1 107

2 114

3 121

4 128

5 135

6 142

7 149

8 156

9 163

1060

1 106

2 113

3 119

4 126

5 132

6 139

7 145

8 151

9 157

42

1 4.2

2 8.4

3 12.6

4 16.8

5 21.0

6 25.2

7 29.4

8 33.6

9 37.8

43

1 4.3

2 8.6

3 12.9

4 17.2

5 21.5

6 25.8

7 30.1

8 34.4

9 38.7

| i  | n  | Sin        | d.   | Tang       | d. c. | Cotg       | Con        | d. | n  | i  |
|----|----|------------|------|------------|-------|------------|------------|----|----|----|
| 20 | 0  | 9.293 3993 | 1050 | 9.301 9514 | 1093  | 0.698 0486 | 9.991 4478 | 42 | 0  | 40 |
|    | 10 | 9.293 5043 | 1050 | 9.302 0607 | 1093  | 0.697 9493 | 9.991 4446 | 42 | 50 |    |
|    | 20 | 9.293 6093 | 1050 | 9.302 1699 | 1093  | 0.697 8504 | 9.991 4414 | 42 | 40 |    |
|    | 30 | 9.293 7143 | 1050 | 9.302 2791 | 1093  | 0.697 7509 | 9.991 4382 | 42 | 30 |    |
|    | 40 | 9.293 8193 | 1050 | 9.302 3883 | 1093  | 0.697 6517 | 9.991 4350 | 42 | 20 |    |
|    | 50 | 9.293 9242 | 1049 | 9.302 4975 | 1093  | 0.697 5525 | 9.991 4317 | 42 | 10 |    |
| 21 | 0  | 9.294 0291 | 1049 | 9.303 6066 | 1093  | 0.697 4533 | 9.991 4285 | 42 | 0  | 39 |
|    | 10 | 9.294 1340 | 1048 | 9.303 7157 | 1093  | 0.697 3541 | 9.991 4253 | 42 | 50 |    |
|    | 20 | 9.294 2388 | 1048 | 9.303 8248 | 1093  | 0.697 2554 | 9.991 4221 | 42 | 40 |    |
|    | 30 | 9.294 3437 | 1048 | 9.303 9339 | 1093  | 0.697 1566 | 9.991 4189 | 42 | 30 |    |
|    | 40 | 9.294 4485 | 1047 | 9.304 0429 | 1093  | 0.696 0671 | 9.991 4157 | 42 | 20 |    |
|    | 50 | 9.294 5532 | 1047 | 9.304 1519 | 1093  | 0.696 1681 | 9.991 4125 | 42 | 10 |    |
| 22 | 0  | 9.294 6580 | 1047 | 9.304 2609 | 1093  | 0.696 2691 | 9.991 4093 | 42 | 0  | 38 |
|    | 10 | 9.294 7627 | 1047 | 9.304 3699 | 1089  | 0.696 3701 | 9.991 4061 | 42 | 50 |    |
|    | 20 | 9.294 8674 | 1047 | 9.304 4788 | 1089  | 0.696 4712 | 9.991 4029 | 42 | 40 |    |
|    | 30 | 9.294 9721 | 1046 | 9.304 5877 | 1089  | 0.696 5723 | 9.991 3997 | 42 | 30 |    |
|    | 40 | 9.295 0767 | 1046 | 9.304 6966 | 1089  | 0.696 6734 | 9.991 3965 | 42 | 20 |    |
|    | 50 | 9.295 1814 | 1045 | 9.304 8054 | 1089  | 0.696 7745 | 9.991 3933 | 42 | 10 |    |
| 23 | 0  | 9.295 2859 | 1046 | 9.304 9143 | 1088  | 0.696 8755 | 9.991 3901 | 42 | 0  | 37 |
|    | 10 | 9.295 3905 | 1045 | 9.304 0231 | 1087  | 0.696 9766 | 9.991 3869 | 42 | 50 |    |
|    | 20 | 9.295 4950 | 1046 | 9.304 1319 | 1088  | 0.696 0776 | 9.991 3837 | 42 | 40 |    |
|    | 30 | 9.295 5996 | 1045 | 9.304 2406 | 1087  | 0.696 1787 | 9.991 3805 | 42 | 30 |    |
|    | 40 | 9.295 7041 | 1045 | 9.304 3494 | 1087  | 0.696 2797 | 9.991 3773 | 42 | 20 |    |
|    | 50 | 9.295 8085 | 1044 | 9.304 4582 | 1087  | 0.696 3807 | 9.991 3741 | 42 | 10 |    |
| 24 | 0  | 9.295 9129 | 1045 | 9.304 5669 | 1087  | 0.696 4817 | 9.991 3709 | 42 | 0  | 36 |
|    | 10 | 9.296 0174 | 1044 | 9.304 6754 | 1086  | 0.696 5826 | 9.991 3677 | 42 | 50 |    |
|    | 20 | 9.296 1217 | 1044 | 9.304 7840 | 1086  | 0.696 6836 | 9.991 3645 | 42 | 40 |    |
|    | 30 | 9.296 2261 | 1044 | 9.304 8926 | 1086  | 0.696 7846 | 9.991 3613 | 42 | 30 |    |
|    | 40 | 9.296 3304 | 1043 | 9.304 9912 | 1086  | 0.696 8856 | 9.991 3581 | 42 | 20 |    |
|    | 50 | 9.296 4347 | 1043 | 9.305 1007 | 1086  | 0.696 9866 | 9.991 3549 | 42 | 10 |    |
| 25 | 0  | 9.296 5390 | 1043 | 9.305 2121 | 1085  | 0.697 0876 | 9.991 3517 | 42 | 0  | 35 |
|    | 10 | 9.296 6431 | 1042 | 9.305 3208 | 1084  | 0.697 1886 | 9.991 3485 | 42 | 50 |    |
|    | 20 | 9.296 7475 | 1042 | 9.305 4294 | 1084  | 0.697 2896 | 9.991 3453 | 42 | 40 |    |
|    | 30 | 9.296 8517 | 1042 | 9.305 5379 | 1084  | 0.697 3906 | 9.991 3421 | 42 | 30 |    |
|    | 40 | 9.296 9559 | 1041 | 9.305 6464 | 1084  | 0.697 4916 | 9.991 3389 | 42 | 20 |    |
|    | 50 | 9.297 0600 | 1041 | 9.305 7549 | 1084  | 0.697 5926 | 9.991 3357 | 42 | 10 |    |
| 26 | 0  | 9.297 1641 | 1041 | 9.305 8639 | 1084  | 0.697 6936 | 9.991 3325 | 42 | 0  | 34 |
|    | 10 | 9.297 2682 | 1041 | 9.305 9724 | 1084  | 0.697 7946 | 9.991 3293 | 42 | 50 |    |
|    | 20 | 9.297 3723 | 1040 | 9.306 0809 | 1084  | 0.697 8956 | 9.991 3261 | 42 | 40 |    |
|    | 30 | 9.297 4763 | 1040 | 9.306 1894 | 1084  | 0.697 9966 | 9.991 3229 | 42 | 30 |    |
|    | 40 | 9.297 5803 | 1040 | 9.306 2979 | 1084  | 0.698 0976 | 9.991 3197 | 42 | 20 |    |
|    | 50 | 9.297 6843 | 1039 | 9.306 4065 | 1084  | 0.698 1986 | 9.991 3165 | 42 | 10 |    |
| 27 | 0  | 9.297 7883 | 1039 | 9.306 5150 | 1084  | 0.698 2996 | 9.991 3133 | 42 | 0  | 33 |
|    | 10 | 9.297 8923 | 1039 | 9.306 6236 | 1084  | 0.698 3906 | 9.991 3101 | 42 | 50 |    |
|    | 20 | 9.297 9962 | 1039 | 9.306 7321 | 1084  | 0.698 4916 | 9.991 3069 | 42 | 40 |    |
|    | 30 | 9.298 1001 | 1038 | 9.306 8406 | 1084  | 0.698 5926 | 9.991 3037 | 42 | 30 |    |
|    | 40 | 9.298 2039 | 1038 | 9.306 9491 | 1084  | 0.698 6936 | 9.991 3005 | 42 | 20 |    |
|    | 50 | 9.298 3078 | 1038 | 9.307 0576 | 1084  | 0.698 7946 | 9.991 2973 | 42 | 10 |    |
| 28 | 0  | 9.298 4116 | 1038 | 9.307 1661 | 1084  | 0.698 8956 | 9.991 2941 | 42 | 0  | 32 |
|    | 10 | 9.298 5154 | 1037 | 9.307 2746 | 1083  | 0.698 9966 | 9.991 2909 | 42 | 50 |    |
|    | 20 | 9.298 6191 | 1038 | 9.307 3831 | 1083  | 0.699 0976 | 9.991 2877 | 42 | 40 |    |
|    | 30 | 9.298 7229 | 1037 | 9.307 4916 | 1083  | 0.699 1986 | 9.991 2845 | 42 | 30 |    |
|    | 40 | 9.298 8266 | 1037 | 9.307 5996 | 1083  | 0.699 2996 | 9.991 2813 | 42 | 20 |    |
|    | 50 | 9.298 9303 | 1036 | 9.307 7076 | 1083  | 0.699 3906 | 9.991 2781 | 42 | 10 |    |
| 29 | 0  | 9.299 0339 | 1036 | 9.307 8161 | 1079  | 0.699 4916 | 9.991 2749 | 42 | 0  | 31 |
|    | 10 | 9.299 1375 | 1036 | 9.307 9246 | 1079  | 0.699 5926 | 9.991 2717 | 42 | 50 |    |
|    | 20 | 9.299 2411 | 1036 | 9.308 0331 | 1079  | 0.699 6936 | 9.991 2685 | 42 | 40 |    |
|    | 30 | 9.299 3447 | 1036 | 9.308 1416 | 1079  | 0.699 7946 | 9.991 2653 | 42 | 30 |    |
|    | 40 | 9.299 4484 | 1035 | 9.308 2491 | 1078  | 0.699 8956 | 9.991 2621 | 42 | 20 |    |
|    | 50 | 9.299 5518 | 1035 | 9.308 3576 | 1078  | 0.699 9966 | 9.991 2589 | 42 | 10 |    |
| 30 | 0  | 9.299 6553 | 1035 | 9.308 4661 | 1078  | 0.699 0976 | 9.991 2557 | 42 | 0  | 30 |



|    | "  | Sin        | d.   | Tang       | d. c. | Cotg       | Coa        | d. | "  |      |
|----|----|------------|------|------------|-------|------------|------------|----|----|------|
| 30 | 0  | 9.299 6553 | 1035 | 9.308 4626 | 1078  | 0.691 5374 | 9.991 1927 | 43 | 0  | 30   |
|    | 10 | 9.299 7588 | 1034 | 9.308 5704 | 1077  | 0.691 4296 | 9.991 1884 | 43 | 50 | 1050 |
|    | 20 | 9.299 8622 | 1035 | 9.308 6781 | 1077  | 0.691 3219 | 9.991 1841 | 43 | 40 | 105  |
|    | 30 | 9.299 9657 | 1034 | 9.308 7858 | 1077  | 0.691 2142 | 9.991 1799 | 43 | 30 | 210  |
|    | 40 | 9.300 0691 | 1033 | 9.308 8935 | 1077  | 0.691 1065 | 9.991 1756 | 43 | 20 | 315  |
|    | 50 | 9.300 1724 | 1034 | 9.309 0012 | 1076  | 0.690 9988 | 9.991 1713 | 43 | 10 | 420  |
| 31 | 0  | 9.300 2758 | 1033 | 9.309 1088 | 1076  | 0.690 8912 | 9.991 1670 | 43 | 0  | 525  |
|    | 10 | 9.300 3791 | 1033 | 9.309 2164 | 1076  | 0.690 7836 | 9.991 1627 | 43 | 50 | 630  |
|    | 20 | 9.300 4824 | 1033 | 9.309 3240 | 1076  | 0.690 6760 | 9.991 1584 | 43 | 40 | 735  |
|    | 30 | 9.300 5857 | 1032 | 9.309 4316 | 1075  | 0.690 5684 | 9.991 1541 | 43 | 30 | 840  |
|    | 40 | 9.300 6889 | 1032 | 9.309 5391 | 1075  | 0.690 4609 | 9.991 1498 | 43 | 20 | 945  |
|    | 50 | 9.300 7921 | 1032 | 9.309 6466 | 1075  | 0.690 3534 | 9.991 1455 | 43 | 10 |      |
| 32 | 0  | 9.300 8953 | 1032 | 9.309 7541 | 1075  | 0.690 2459 | 9.991 1412 | 43 | 0  | 1040 |
|    | 10 | 9.300 9985 | 1032 | 9.309 8616 | 1074  | 0.690 1384 | 9.991 1369 | 43 | 50 | 104  |
|    | 20 | 9.301 1017 | 1031 | 9.309 9690 | 1074  | 0.690 0310 | 9.991 1326 | 43 | 40 | 208  |
|    | 30 | 9.301 2048 | 1031 | 9.310 0764 | 1074  | 0.689 9236 | 9.991 1283 | 43 | 30 | 312  |
|    | 40 | 9.301 3079 | 1030 | 9.310 1838 | 1074  | 0.689 8162 | 9.991 1240 | 43 | 20 | 416  |
|    | 50 | 9.301 4109 | 1031 | 9.310 2912 | 1073  | 0.689 7088 | 9.991 1197 | 43 | 10 | 520  |
| 33 | 0  | 9.301 5140 | 1030 | 9.310 3985 | 1074  | 0.689 6015 | 9.991 1154 | 43 | 0  | 624  |
|    | 10 | 9.301 6170 | 1030 | 9.310 5059 | 1073  | 0.689 4941 | 9.991 1111 | 43 | 50 | 728  |
|    | 20 | 9.301 7200 | 1029 | 9.310 6132 | 1072  | 0.689 3868 | 9.991 1068 | 43 | 40 | 832  |
|    | 30 | 9.301 8229 | 1030 | 9.310 7204 | 1073  | 0.689 2796 | 9.991 1025 | 43 | 30 | 936  |
|    | 40 | 9.301 9259 | 1029 | 9.310 8277 | 1072  | 0.689 1723 | 9.991 0982 | 43 | 20 |      |
|    | 50 | 9.302 0288 | 1029 | 9.310 9349 | 1072  | 0.689 0651 | 9.991 0939 | 43 | 10 | 1030 |
| 34 | 0  | 9.302 1317 | 1029 | 9.311 0421 | 1072  | 0.688 9579 | 9.991 0896 | 43 | 0  | 103  |
|    | 10 | 9.302 2346 | 1028 | 9.311 1493 | 1071  | 0.688 8507 | 9.991 0853 | 43 | 50 | 206  |
|    | 20 | 9.302 3374 | 1028 | 9.311 2564 | 1071  | 0.688 7436 | 9.991 0810 | 43 | 40 | 309  |
|    | 30 | 9.302 4402 | 1028 | 9.311 3635 | 1071  | 0.688 6365 | 9.991 0767 | 44 | 30 | 412  |
|    | 40 | 9.302 5430 | 1028 | 9.311 4706 | 1071  | 0.688 5294 | 9.991 0723 | 44 | 20 | 515  |
|    | 50 | 9.302 6458 | 1027 | 9.311 5777 | 1071  | 0.688 4223 | 9.991 0680 | 43 | 10 | 618  |
| 35 | 0  | 9.302 7485 | 1027 | 9.311 6848 | 1070  | 0.688 3152 | 9.991 0637 | 43 | 0  | 721  |
|    | 10 | 9.302 8512 | 1027 | 9.311 7918 | 1070  | 0.688 2082 | 9.991 0594 | 43 | 50 | 824  |
|    | 20 | 9.302 9539 | 1027 | 9.311 8988 | 1070  | 0.688 1012 | 9.991 0551 | 43 | 40 | 927  |
|    | 30 | 9.303 0566 | 1026 | 9.312 0058 | 1069  | 0.687 9942 | 9.991 0508 | 44 | 30 |      |
|    | 40 | 9.303 1592 | 1026 | 9.312 1127 | 1070  | 0.687 8873 | 9.991 0464 | 43 | 20 | 1020 |
|    | 50 | 9.303 2618 | 1026 | 9.312 2197 | 1069  | 0.687 7803 | 9.991 0421 | 43 | 10 | 101  |
| 36 | 0  | 9.303 3644 | 1025 | 9.312 3266 | 1069  | 0.687 6734 | 9.991 0378 | 43 | 0  | 204  |
|    | 10 | 9.303 4669 | 1026 | 9.312 4335 | 1068  | 0.687 5665 | 9.991 0335 | 43 | 50 | 306  |
|    | 20 | 9.303 5695 | 1025 | 9.312 5403 | 1069  | 0.687 4597 | 9.991 0292 | 44 | 40 | 408  |
|    | 30 | 9.303 6720 | 1025 | 9.312 6472 | 1068  | 0.687 3528 | 9.991 0248 | 43 | 30 | 510  |
|    | 40 | 9.303 7745 | 1024 | 9.312 7540 | 1068  | 0.687 2460 | 9.991 0205 | 43 | 20 | 612  |
|    | 50 | 9.303 8769 | 1025 | 9.312 8608 | 1067  | 0.687 1392 | 9.991 0162 | 43 | 10 | 714  |
| 37 | 0  | 9.303 9794 | 1024 | 9.312 9675 | 1068  | 0.687 0325 | 9.991 0119 | 44 | 0  | 816  |
|    | 10 | 9.304 0818 | 1024 | 9.313 0743 | 1067  | 0.686 9257 | 9.991 0075 | 43 | 50 | 918  |
|    | 20 | 9.304 1842 | 1023 | 9.313 1810 | 1067  | 0.686 8190 | 9.991 0032 | 43 | 40 |      |
|    | 30 | 9.304 2865 | 1024 | 9.313 2877 | 1066  | 0.686 7123 | 9.990 9989 | 44 | 30 | 43   |
|    | 40 | 9.304 3889 | 1023 | 9.313 3943 | 1067  | 0.686 6057 | 9.990 9945 | 43 | 20 | 12.9 |
|    | 50 | 9.304 4912 | 1022 | 9.313 5010 | 1066  | 0.686 4990 | 9.990 9902 | 43 | 10 | 17.2 |
| 38 | 0  | 9.304 5934 | 1023 | 9.313 6076 | 1066  | 0.686 3924 | 9.990 9859 | 44 | 0  | 21.5 |
|    | 10 | 9.304 6957 | 1022 | 9.313 7142 | 1065  | 0.686 2858 | 9.990 9815 | 43 | 50 | 25.8 |
|    | 20 | 9.304 7979 | 1022 | 9.313 8207 | 1066  | 0.686 1793 | 9.990 9772 | 43 | 40 | 30.1 |
|    | 30 | 9.304 9001 | 1022 | 9.313 9273 | 1065  | 0.686 0727 | 9.990 9729 | 44 | 30 | 34.4 |
|    | 40 | 9.305 0023 | 1022 | 9.314 0338 | 1065  | 0.685 9662 | 9.990 9685 | 43 | 20 | 38.7 |
|    | 50 | 9.305 1045 | 1021 | 9.314 1403 | 1065  | 0.685 8597 | 9.990 9642 | 43 | 10 |      |
| 39 | 0  | 9.305 2066 | 1021 | 9.314 2468 | 1064  | 0.685 7532 | 9.990 9598 | 44 | 0  | 44   |
|    | 10 | 9.305 3087 | 1021 | 9.314 3532 | 1065  | 0.685 6468 | 9.990 9555 | 43 | 50 | 4.4  |
|    | 20 | 9.305 4108 | 1021 | 9.314 4597 | 1064  | 0.685 5403 | 9.990 9512 | 43 | 40 | 8.8  |
|    | 30 | 9.305 5129 | 1020 | 9.314 5661 | 1063  | 0.685 4339 | 9.990 9468 | 44 | 30 | 13.1 |
|    | 40 | 9.305 6149 | 1020 | 9.314 6724 | 1064  | 0.685 3276 | 9.990 9425 | 43 | 20 | 17.6 |
|    | 50 | 9.305 7169 | 1020 | 9.314 7788 | 1063  | 0.685 2212 | 9.990 9381 | 43 | 10 | 22.0 |
| 40 | 0  | 9.305 8189 |      | 9.314 8851 |       | 0.685 1149 | 9.990 9338 | 43 | 0  | 26.4 |
|    |    |            |      |            |       |            |            |    |    | 30.8 |
|    |    |            |      |            |       |            |            |    |    | 35.2 |
|    |    |            |      |            |       |            |            |    |    | 39.6 |
|    | "  | Coa        | d.   | Cotg       | d. c. | Tang       | Sin        | d. | "  |      |



1060  
1 106  
2 105  
3 104  
4 103  
5 102  
6 101  
7 100  
8 99  
9 98

1050  
1 105  
2 104  
3 103  
4 102  
5 101  
6 100  
7 99  
8 98  
9 97

1040  
1 104  
2 103  
3 102  
4 101  
5 100  
6 99  
7 98  
8 97  
9 96

1030  
1 103  
2 102  
3 101  
4 100  
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7 97  
8 96  
9 95

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1 102  
2 101  
3 100  
4 99  
5 98  
6 97  
7 96  
8 95  
9 94

1010  
1 101  
2 100  
3 99  
4 98  
5 97  
6 96  
7 95  
8 94  
9 93

|    | n  | Sin        | d.   | Tang       | d. c. | Cotg       | Con        | d. | n  |    |
|----|----|------------|------|------------|-------|------------|------------|----|----|----|
| 40 | 0  | 9.305 8189 | 1020 | 9.314 8851 | 1061  | 0.615 1139 | 9.990 9338 | 44 | 0  | 20 |
|    | 10 | 9.305 9209 | 1019 | 9.314 9934 | 1061  | 0.615 0056 | 9.990 9231 | 44 | 50 |    |
|    | 20 | 9.306 0228 | 1019 | 9.315 0977 | 1061  | 0.615 9073 | 9.990 9124 | 44 | 40 |    |
|    | 30 | 9.306 1247 | 1019 | 9.315 2030 | 1061  | 0.616 8090 | 9.990 9017 | 44 | 30 |    |
|    | 40 | 9.306 2266 | 1018 | 9.315 3102 | 1061  | 0.616 7108 | 9.990 8910 | 44 | 20 |    |
|    | 50 | 9.306 3284 | 1019 | 9.315 4164 | 1061  | 0.616 6126 | 9.990 8803 | 44 | 10 |    |
| 41 | 0  | 9.306 4303 | 1018 | 9.315 5226 | 1061  | 0.616 5144 | 9.990 8696 | 44 | 0  | 19 |
|    | 10 | 9.306 5321 | 1018 | 9.315 6288 | 1061  | 0.616 4162 | 9.990 8589 | 44 | 50 |    |
|    | 20 | 9.306 6339 | 1017 | 9.315 7349 | 1061  | 0.616 3180 | 9.990 8482 | 44 | 40 |    |
|    | 30 | 9.306 7356 | 1017 | 9.315 8410 | 1061  | 0.616 2198 | 9.990 8375 | 44 | 30 |    |
|    | 40 | 9.306 8373 | 1018 | 9.315 9471 | 1061  | 0.616 1216 | 9.990 8268 | 44 | 20 |    |
|    | 50 | 9.306 9391 | 1016 | 9.316 0532 | 1061  | 0.616 0234 | 9.990 8161 | 44 | 10 |    |
| 42 | 0  | 9.307 0409 | 1017 | 9.316 1592 | 1061  | 0.615 9252 | 9.990 8054 | 44 | 0  | 18 |
|    | 10 | 9.307 1424 | 1016 | 9.316 2652 | 1061  | 0.615 8270 | 9.990 7947 | 44 | 50 |    |
|    | 20 | 9.307 2440 | 1016 | 9.316 3712 | 1061  | 0.615 7288 | 9.990 7840 | 44 | 40 |    |
|    | 30 | 9.307 3456 | 1016 | 9.316 4772 | 1061  | 0.615 6306 | 9.990 7733 | 44 | 30 |    |
|    | 40 | 9.307 4472 | 1016 | 9.316 5832 | 1061  | 0.615 5324 | 9.990 7626 | 44 | 20 |    |
|    | 50 | 9.307 5488 | 1015 | 9.316 6892 | 1061  | 0.615 4342 | 9.990 7519 | 44 | 10 |    |
| 43 | 0  | 9.307 6503 | 1015 | 9.316 7952 | 1061  | 0.615 3360 | 9.990 7412 | 44 | 0  | 17 |
|    | 10 | 9.307 7518 | 1015 | 9.316 9012 | 1061  | 0.615 2378 | 9.990 7305 | 44 | 50 |    |
|    | 20 | 9.307 8533 | 1015 | 9.317 0072 | 1061  | 0.615 1396 | 9.990 7198 | 44 | 40 |    |
|    | 30 | 9.307 9548 | 1014 | 9.317 1132 | 1061  | 0.615 0414 | 9.990 7091 | 44 | 30 |    |
|    | 40 | 9.308 0562 | 1014 | 9.317 2192 | 1061  | 0.614 9432 | 9.990 6984 | 44 | 20 |    |
|    | 50 | 9.308 1576 | 1014 | 9.317 3252 | 1061  | 0.614 8450 | 9.990 6877 | 44 | 10 |    |
| 44 | 0  | 9.308 2590 | 1014 | 9.317 4312 | 1061  | 0.614 7468 | 9.990 6770 | 44 | 0  | 16 |
|    | 10 | 9.308 3604 | 1013 | 9.317 5372 | 1061  | 0.614 6486 | 9.990 6663 | 44 | 50 |    |
|    | 20 | 9.308 4617 | 1013 | 9.317 6432 | 1061  | 0.614 5504 | 9.990 6556 | 44 | 40 |    |
|    | 30 | 9.308 5630 | 1013 | 9.317 7492 | 1061  | 0.614 4522 | 9.990 6449 | 44 | 30 |    |
|    | 40 | 9.308 6643 | 1013 | 9.317 8552 | 1061  | 0.614 3540 | 9.990 6342 | 44 | 20 |    |
|    | 50 | 9.308 7656 | 1012 | 9.317 9612 | 1061  | 0.614 2558 | 9.990 6235 | 44 | 10 |    |
| 45 | 0  | 9.308 8668 | 1012 | 9.318 0672 | 1061  | 0.614 1576 | 9.990 6128 | 44 | 0  | 15 |
|    | 10 | 9.308 9680 | 1012 | 9.318 1732 | 1061  | 0.614 0594 | 9.990 6021 | 44 | 50 |    |
|    | 20 | 9.309 0692 | 1012 | 9.318 2792 | 1061  | 0.613 9612 | 9.990 5914 | 44 | 40 |    |
|    | 30 | 9.309 1704 | 1011 | 9.318 3852 | 1061  | 0.613 8630 | 9.990 5807 | 44 | 30 |    |
|    | 40 | 9.309 2715 | 1011 | 9.318 4912 | 1061  | 0.613 7648 | 9.990 5700 | 44 | 20 |    |
|    | 50 | 9.309 3726 | 1011 | 9.318 5972 | 1061  | 0.613 6666 | 9.990 5593 | 44 | 10 |    |
| 46 | 0  | 9.309 4737 | 1011 | 9.318 6932 | 1061  | 0.613 5684 | 9.990 5486 | 44 | 0  | 14 |
|    | 10 | 9.309 5748 | 1011 | 9.318 7992 | 1061  | 0.613 4702 | 9.990 5379 | 44 | 50 |    |
|    | 20 | 9.309 6759 | 1010 | 9.318 9052 | 1061  | 0.613 3720 | 9.990 5272 | 44 | 40 |    |
|    | 30 | 9.309 7769 | 1010 | 9.319 0112 | 1061  | 0.613 2738 | 9.990 5165 | 44 | 30 |    |
|    | 40 | 9.309 8779 | 1009 | 9.319 1172 | 1061  | 0.613 1756 | 9.990 5058 | 44 | 20 |    |
|    | 50 | 9.309 9788 | 1010 | 9.319 2232 | 1061  | 0.613 0774 | 9.990 4951 | 44 | 10 |    |
| 47 | 0  | 9.310 0798 | 1009 | 9.319 3292 | 1061  | 0.612 9792 | 9.990 4844 | 44 | 0  | 13 |
|    | 10 | 9.310 1807 | 1009 | 9.319 4352 | 1061  | 0.612 8810 | 9.990 4737 | 44 | 50 |    |
|    | 20 | 9.310 2816 | 1009 | 9.319 5412 | 1061  | 0.612 7828 | 9.990 4630 | 44 | 40 |    |
|    | 30 | 9.310 3825 | 1008 | 9.319 6472 | 1061  | 0.612 6846 | 9.990 4523 | 44 | 30 |    |
|    | 40 | 9.310 4834 | 1008 | 9.319 7532 | 1061  | 0.612 5864 | 9.990 4416 | 44 | 20 |    |
|    | 50 | 9.310 5841 | 1008 | 9.319 8592 | 1061  | 0.612 4882 | 9.990 4309 | 44 | 10 |    |
| 48 | 0  | 9.310 6849 | 1008 | 9.319 9652 | 1061  | 0.612 3900 | 9.990 4202 | 44 | 0  | 12 |
|    | 10 | 9.310 7857 | 1007 | 9.320 0712 | 1061  | 0.612 2918 | 9.990 4095 | 44 | 50 |    |
|    | 20 | 9.310 8864 | 1008 | 9.320 1772 | 1061  | 0.612 1936 | 9.990 3988 | 44 | 40 |    |
|    | 30 | 9.310 9872 | 1007 | 9.320 2832 | 1061  | 0.612 0954 | 9.990 3881 | 44 | 30 |    |
|    | 40 | 9.311 0879 | 1007 | 9.320 3892 | 1061  | 0.612 0072 | 9.990 3774 | 44 | 20 |    |
|    | 50 | 9.311 1886 | 1006 | 9.320 4952 | 1061  | 0.611 9090 | 9.990 3667 | 44 | 10 |    |
| 49 | 0  | 9.311 2893 | 1006 | 9.320 5912 | 1061  | 0.611 8108 | 9.990 3560 | 44 | 0  | 11 |
|    | 10 | 9.311 3898 | 1006 | 9.320 6972 | 1061  | 0.611 7126 | 9.990 3453 | 44 | 50 |    |
|    | 20 | 9.311 4904 | 1006 | 9.320 8032 | 1061  | 0.611 6144 | 9.990 3346 | 44 | 40 |    |
|    | 30 | 9.311 5910 | 1006 | 9.320 9092 | 1061  | 0.611 5162 | 9.990 3239 | 44 | 30 |    |
|    | 40 | 9.311 6916 | 1005 | 9.321 0152 | 1061  | 0.611 4180 | 9.990 3132 | 44 | 20 |    |
|    | 50 | 9.311 7921 | 1005 | 9.321 1212 | 1061  | 0.611 3198 | 9.990 3025 | 44 | 10 |    |
| 50 | 0  | 9.311 8926 | 1005 | 9.321 2272 | 1061  | 0.611 2216 | 9.990 2918 | 44 | 0  | 10 |
|    | n  | Con        | d.   | Cotg       | d. c. | Tang       | Sin        | d. | n  |    |



| i  | "  | Sin        | d.   | Tang       | d. c. | Cotg       | Cos        | d. | "  | i  |
|----|----|------------|------|------------|-------|------------|------------|----|----|----|
| 50 | o  | 9.311 8926 | 1005 | 9.321 2216 | 1049  | 0.678 7784 | 9.990 6710 | 44 | o  | 10 |
|    | 10 | 9.311 9931 | 1004 | 9.321 3265 | 1049  | 0.678 6735 | 9.990 6666 | 44 | 50 |    |
|    | 20 | 9.312 0935 | 1005 | 9.321 4314 | 1048  | 0.678 5686 | 9.990 6622 | 44 | 40 |    |
|    | 30 | 9.312 1940 | 1004 | 9.321 5362 | 1048  | 0.678 4638 | 9.990 6578 | 44 | 30 |    |
|    | 40 | 9.312 2944 | 1004 | 9.321 6410 | 1048  | 0.678 3590 | 9.990 6533 | 44 | 20 |    |
|    | 50 | 9.312 3948 | 1003 | 9.321 7458 | 1048  | 0.678 2542 | 9.990 6489 | 44 | 10 |    |
| 51 | o  | 9.312 4951 | 1004 | 9.321 8506 | 1048  | 0.678 1494 | 9.990 6445 | 44 | o  | 9  |
|    | 10 | 9.312 5955 | 1003 | 9.321 9554 | 1047  | 0.678 0446 | 9.990 6401 | 44 | 50 |    |
|    | 20 | 9.312 6958 | 1003 | 9.322 0601 | 1047  | 0.677 9399 | 9.990 6357 | 44 | 40 |    |
|    | 30 | 9.312 7961 | 1002 | 9.322 1648 | 1047  | 0.677 8352 | 9.990 6313 | 44 | 30 |    |
|    | 40 | 9.312 8963 | 1003 | 9.322 2695 | 1047  | 0.677 7305 | 9.990 6268 | 44 | 20 |    |
|    | 50 | 9.312 9966 | 1002 | 9.322 3742 | 1046  | 0.677 6258 | 9.990 6224 | 44 | 10 |    |
| 52 | o  | 9.313 0968 | 1002 | 9.322 4788 | 1046  | 0.677 5212 | 9.990 6180 | 44 | o  | 8  |
|    | 10 | 9.313 1970 | 1001 | 9.322 5834 | 1046  | 0.677 4166 | 9.990 6136 | 45 | 50 |    |
|    | 20 | 9.313 2971 | 1002 | 9.322 6880 | 1046  | 0.677 3120 | 9.990 6091 | 44 | 40 |    |
|    | 30 | 9.313 3973 | 1001 | 9.322 7926 | 1045  | 0.677 2074 | 9.990 6047 | 44 | 30 |    |
|    | 40 | 9.313 4974 | 1001 | 9.322 8971 | 1045  | 0.677 1029 | 9.990 6003 | 44 | 20 |    |
|    | 50 | 9.313 5975 | 1001 | 9.323 0016 | 1045  | 0.676 9984 | 9.990 5959 | 45 | 10 |    |
| 53 | o  | 9.313 6976 | 1000 | 9.323 1061 | 1045  | 0.676 8939 | 9.990 5914 | 44 | o  | 7  |
|    | 10 | 9.313 7976 | 1000 | 9.323 2106 | 1045  | 0.676 7894 | 9.990 5870 | 44 | 50 |    |
|    | 20 | 9.313 8976 | 1000 | 9.323 3151 | 1044  | 0.676 6849 | 9.990 5826 | 45 | 40 |    |
|    | 30 | 9.313 9976 | 1000 | 9.323 4195 | 1044  | 0.676 5805 | 9.990 5781 | 44 | 30 |    |
|    | 40 | 9.314 0976 | 1000 | 9.323 5239 | 1044  | 0.676 4761 | 9.990 5737 | 44 | 20 |    |
|    | 50 | 9.314 1976 | 999  | 9.323 6283 | 1044  | 0.676 3717 | 9.990 5693 | 45 | 10 |    |
| 54 | o  | 9.314 2975 | 999  | 9.323 7327 | 1043  | 0.676 2673 | 9.990 5648 | 44 | o  | 6  |
|    | 10 | 9.314 3974 | 999  | 9.323 8370 | 1043  | 0.676 1630 | 9.990 5604 | 45 | 50 |    |
|    | 20 | 9.314 4973 | 998  | 9.323 9413 | 1043  | 0.676 0587 | 9.990 5559 | 44 | 40 |    |
|    | 30 | 9.314 5971 | 998  | 9.324 0456 | 1043  | 0.675 9544 | 9.990 5515 | 44 | 30 |    |
|    | 40 | 9.314 6969 | 998  | 9.324 1499 | 1042  | 0.675 8501 | 9.990 5471 | 45 | 20 |    |
|    | 50 | 9.314 7967 | 998  | 9.324 2541 | 1043  | 0.675 7459 | 9.990 5426 | 44 | 10 |    |
| 55 | o  | 9.314 8965 | 998  | 9.324 3584 | 1042  | 0.675 6416 | 9.990 5382 | 45 | o  | 5  |
|    | 10 | 9.314 9963 | 997  | 9.324 4626 | 1041  | 0.675 5374 | 9.990 5337 | 44 | 50 |    |
|    | 20 | 9.315 0960 | 997  | 9.324 5667 | 1042  | 0.675 4333 | 9.990 5293 | 45 | 40 |    |
|    | 30 | 9.315 1957 | 997  | 9.324 6709 | 1041  | 0.675 3291 | 9.990 5248 | 44 | 30 |    |
|    | 40 | 9.315 2954 | 997  | 9.324 7750 | 1041  | 0.675 2250 | 9.990 5204 | 44 | 20 |    |
|    | 50 | 9.315 3951 | 996  | 9.324 8791 | 1041  | 0.675 1209 | 9.990 5159 | 44 | 10 |    |
| 56 | o  | 9.315 4947 | 996  | 9.324 9832 | 1041  | 0.675 0168 | 9.990 5115 | 45 | o  | 4  |
|    | 10 | 9.315 5943 | 996  | 9.325 0873 | 1040  | 0.674 9127 | 9.990 5070 | 44 | 50 |    |
|    | 20 | 9.315 6939 | 996  | 9.325 1913 | 1040  | 0.674 8087 | 9.990 5026 | 45 | 40 |    |
|    | 30 | 9.315 7935 | 995  | 9.325 2953 | 1040  | 0.674 7047 | 9.990 4981 | 44 | 30 |    |
|    | 40 | 9.315 8930 | 996  | 9.325 3993 | 1040  | 0.674 6007 | 9.990 4937 | 45 | 20 |    |
|    | 50 | 9.315 9926 | 995  | 9.325 5033 | 1040  | 0.674 4967 | 9.990 4892 | 44 | 10 |    |
| 57 | o  | 9.316 0921 | 994  | 9.325 6073 | 1039  | 0.674 3927 | 9.990 4848 | 45 | o  | 3  |
|    | 10 | 9.316 1915 | 995  | 9.325 7112 | 1039  | 0.674 2888 | 9.990 4803 | 44 | 50 |    |
|    | 20 | 9.316 2910 | 994  | 9.325 8151 | 1039  | 0.674 1849 | 9.990 4759 | 45 | 40 |    |
|    | 30 | 9.316 3904 | 994  | 9.325 9190 | 1038  | 0.674 0810 | 9.990 4714 | 45 | 30 |    |
|    | 40 | 9.316 4898 | 994  | 9.326 0228 | 1039  | 0.673 9772 | 9.990 4669 | 44 | 20 |    |
|    | 50 | 9.316 5892 | 993  | 9.326 1267 | 1038  | 0.673 8733 | 9.990 4625 | 45 | 10 |    |
| 58 | o  | 9.316 6885 | 994  | 9.326 2305 | 1038  | 0.673 7695 | 9.990 4580 | 44 | o  | 2  |
|    | 10 | 9.316 7879 | 993  | 9.326 3343 | 1038  | 0.673 6657 | 9.990 4536 | 45 | 50 |    |
|    | 20 | 9.316 8872 | 992  | 9.326 4381 | 1037  | 0.673 5619 | 9.990 4491 | 45 | 40 |    |
|    | 30 | 9.316 9864 | 992  | 9.326 5418 | 1037  | 0.673 4582 | 9.990 4446 | 44 | 30 |    |
|    | 40 | 9.317 0857 | 993  | 9.326 6455 | 1037  | 0.673 3545 | 9.990 4402 | 44 | 20 |    |
|    | 50 | 9.317 1849 | 992  | 9.326 7492 | 1037  | 0.673 2508 | 9.990 4357 | 45 | 10 |    |
| 59 | o  | 9.317 2841 | 992  | 9.326 8529 | 1037  | 0.673 1472 | 9.990 4312 | 44 | o  | 1  |
|    | 10 | 9.317 3833 | 992  | 9.326 9566 | 1036  | 0.673 0434 | 9.990 4268 | 45 | 50 |    |
|    | 20 | 9.317 4825 | 991  | 9.327 0602 | 1036  | 0.672 9398 | 9.990 4223 | 45 | 40 |    |
|    | 30 | 9.317 5816 | 991  | 9.327 1638 | 1036  | 0.672 8362 | 9.990 4178 | 45 | 30 |    |
|    | 40 | 9.317 6807 | 991  | 9.327 2674 | 1036  | 0.672 7326 | 9.990 4133 | 45 | 20 |    |
|    | 50 | 9.317 7798 | 991  | 9.327 3710 | 1035  | 0.672 6290 | 9.990 4089 | 45 | 10 |    |
| 60 | o  | 9.317 8789 |      | 9.327 4745 |       | 0.672 5255 | 9.990 4044 | 45 | o  | 0  |
| i  | "  | Cos        | d.   | Cotg       | d. c. | Tang       | Sin        | d. | "  | i  |

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1010

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7 107

8 108

9 109

1000

1 100

2 101

3 102

4 103

5 104

6 105

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8 107

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2 8.3

3 13.2

4 17.6

5 22.0

6 26.4

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|      | n  | Sin        | d.  | Tang       | d. c. | Cotg       | Coa         | d. | n  | i  |
|------|----|------------|-----|------------|-------|------------|-------------|----|----|----|
| 1030 | 0  | 9.317 8789 | 991 | 9.327 4745 | 1035  | 0.672 5255 | 9.999 14034 | 48 | 0  | 60 |
|      | 10 | 9.317 9780 | 990 | 9.327 5780 | 1035  | 0.672 4330 | 9.999 13999 | 48 | 50 |    |
|      | 20 | 9.318 0770 | 990 | 9.327 6818 | 1035  | 0.672 3415 | 9.999 13954 | 48 | 40 |    |
|      | 30 | 9.318 1760 | 989 | 9.327 7850 | 1035  | 0.672 2510 | 9.999 13910 | 48 | 30 |    |
|      | 40 | 9.318 2749 | 989 | 9.327 8886 | 1035  | 0.672 1615 | 9.999 13866 | 48 | 20 |    |
|      | 50 | 9.318 3739 | 989 | 9.327 9919 | 1034  | 0.672 0731 | 9.999 13820 | 48 | 10 |    |
| 1    | 0  | 9.318 4728 | 989 | 9.328 0954 | 1034  | 0.671 9847 | 9.999 13775 | 48 | 0  | 59 |
|      | 10 | 9.318 5717 | 989 | 9.328 1987 | 1034  | 0.671 8961 | 9.999 13730 | 48 | 50 |    |
|      | 20 | 9.318 6706 | 989 | 9.328 3021 | 1034  | 0.671 8079 | 9.999 13686 | 48 | 40 |    |
|      | 30 | 9.318 7695 | 988 | 9.328 4054 | 1034  | 0.671 7196 | 9.999 13641 | 48 | 30 |    |
|      | 40 | 9.318 8684 | 988 | 9.328 5087 | 1034  | 0.671 6314 | 9.999 13596 | 48 | 20 |    |
|      | 50 | 9.318 9671 | 988 | 9.328 6120 | 1034  | 0.671 5431 | 9.999 13551 | 48 | 10 |    |
| 2    | 0  | 9.319 0659 | 988 | 9.328 7153 | 1034  | 0.671 4547 | 9.999 13506 | 48 | 0  | 58 |
|      | 10 | 9.319 1647 | 987 | 9.328 8186 | 1034  | 0.671 3664 | 9.999 13461 | 48 | 50 |    |
|      | 20 | 9.319 2634 | 987 | 9.328 9219 | 1034  | 0.671 2781 | 9.999 13416 | 48 | 40 |    |
|      | 30 | 9.319 3621 | 987 | 9.329 0252 | 1034  | 0.671 1898 | 9.999 13371 | 48 | 30 |    |
|      | 40 | 9.319 4608 | 987 | 9.329 1284 | 1034  | 0.671 1015 | 9.999 13326 | 48 | 20 |    |
|      | 50 | 9.319 5595 | 986 | 9.329 2317 | 1034  | 0.671 0132 | 9.999 13281 | 48 | 10 |    |
| 3    | 0  | 9.319 6581 | 986 | 9.329 3350 | 1034  | 0.670 9249 | 9.999 13236 | 48 | 0  | 57 |
|      | 10 | 9.319 7567 | 986 | 9.329 4382 | 1034  | 0.670 8366 | 9.999 13191 | 48 | 50 |    |
|      | 20 | 9.319 8553 | 986 | 9.329 5415 | 1034  | 0.670 7483 | 9.999 13146 | 48 | 40 |    |
|      | 30 | 9.319 9539 | 986 | 9.329 6447 | 1034  | 0.670 6600 | 9.999 13101 | 48 | 30 |    |
|      | 40 | 9.320 0525 | 985 | 9.329 7479 | 1034  | 0.670 5717 | 9.999 13056 | 48 | 20 |    |
|      | 50 | 9.320 1510 | 985 | 9.329 8512 | 1034  | 0.670 4834 | 9.999 13011 | 48 | 10 |    |
| 4    | 0  | 9.320 2495 | 985 | 9.329 9544 | 1034  | 0.670 3951 | 9.999 12966 | 48 | 0  | 56 |
|      | 10 | 9.320 3480 | 984 | 9.330 0576 | 1034  | 0.670 3068 | 9.999 12921 | 48 | 50 |    |
|      | 20 | 9.320 4464 | 984 | 9.330 1608 | 1034  | 0.670 2185 | 9.999 12876 | 48 | 40 |    |
|      | 30 | 9.320 5449 | 984 | 9.330 2640 | 1034  | 0.670 1302 | 9.999 12831 | 48 | 30 |    |
|      | 40 | 9.320 6433 | 984 | 9.330 3672 | 1034  | 0.670 0419 | 9.999 12786 | 48 | 20 |    |
|      | 50 | 9.320 7417 | 984 | 9.330 4704 | 1034  | 0.669 9536 | 9.999 12741 | 48 | 10 |    |
| 5    | 0  | 9.320 8400 | 984 | 9.330 5736 | 1034  | 0.669 8653 | 9.999 12696 | 48 | 0  | 55 |
|      | 10 | 9.320 9383 | 984 | 9.330 6768 | 1034  | 0.669 7770 | 9.999 12651 | 48 | 50 |    |
|      | 20 | 9.321 0367 | 984 | 9.330 7800 | 1034  | 0.669 6887 | 9.999 12606 | 48 | 40 |    |
|      | 30 | 9.321 1350 | 984 | 9.330 8832 | 1034  | 0.669 6004 | 9.999 12561 | 48 | 30 |    |
|      | 40 | 9.321 2333 | 984 | 9.330 9864 | 1034  | 0.669 5121 | 9.999 12516 | 48 | 20 |    |
|      | 50 | 9.321 3315 | 984 | 9.331 0896 | 1034  | 0.669 4238 | 9.999 12471 | 48 | 10 |    |
| 6    | 0  | 9.321 4297 | 984 | 9.331 1928 | 1034  | 0.669 3355 | 9.999 12426 | 48 | 0  | 54 |
|      | 10 | 9.321 5279 | 984 | 9.331 2960 | 1034  | 0.669 2472 | 9.999 12381 | 48 | 50 |    |
|      | 20 | 9.321 6261 | 984 | 9.331 3992 | 1034  | 0.669 1589 | 9.999 12336 | 48 | 40 |    |
|      | 30 | 9.321 7243 | 984 | 9.331 5024 | 1034  | 0.669 0706 | 9.999 12291 | 48 | 30 |    |
|      | 40 | 9.321 8225 | 984 | 9.331 6056 | 1034  | 0.668 9823 | 9.999 12246 | 48 | 20 |    |
|      | 50 | 9.321 9207 | 984 | 9.331 7088 | 1034  | 0.668 8940 | 9.999 12201 | 48 | 10 |    |
| 7    | 0  | 9.322 0189 | 984 | 9.331 8120 | 1034  | 0.668 8057 | 9.999 12156 | 48 | 0  | 53 |
|      | 10 | 9.322 1172 | 984 | 9.331 9152 | 1034  | 0.668 7174 | 9.999 12111 | 48 | 50 |    |
|      | 20 | 9.322 2154 | 984 | 9.332 0184 | 1034  | 0.668 6291 | 9.999 12066 | 48 | 40 |    |
|      | 30 | 9.322 3137 | 984 | 9.332 1216 | 1034  | 0.668 5408 | 9.999 12021 | 48 | 30 |    |
|      | 40 | 9.322 4119 | 984 | 9.332 2248 | 1034  | 0.668 4525 | 9.999 11976 | 48 | 20 |    |
|      | 50 | 9.322 5101 | 984 | 9.332 3280 | 1034  | 0.668 3642 | 9.999 11931 | 48 | 10 |    |
| 8    | 0  | 9.322 6083 | 984 | 9.332 4312 | 1034  | 0.668 2759 | 9.999 11886 | 48 | 0  | 52 |
|      | 10 | 9.322 7066 | 979 | 9.332 5344 | 1034  | 0.668 1876 | 9.999 11841 | 48 | 50 |    |
|      | 20 | 9.322 8048 | 979 | 9.332 6376 | 1034  | 0.668 0993 | 9.999 11796 | 48 | 40 |    |
|      | 30 | 9.322 9031 | 979 | 9.332 7408 | 1034  | 0.668 0110 | 9.999 11751 | 48 | 30 |    |
|      | 40 | 9.322 9994 | 979 | 9.332 8440 | 1034  | 0.667 9227 | 9.999 11706 | 48 | 20 |    |
|      | 50 | 9.323 0966 | 979 | 9.332 9472 | 1034  | 0.667 8344 | 9.999 11661 | 48 | 10 |    |
| 9    | 0  | 9.323 1938 | 978 | 9.333 0504 | 1034  | 0.667 7461 | 9.999 11616 | 48 | 0  | 51 |
|      | 10 | 9.323 2916 | 978 | 9.333 1536 | 1034  | 0.667 6578 | 9.999 11571 | 48 | 50 |    |
|      | 20 | 9.323 3894 | 978 | 9.333 2568 | 1034  | 0.667 5695 | 9.999 11526 | 48 | 40 |    |
|      | 30 | 9.323 4871 | 977 | 9.333 3600 | 1034  | 0.667 4812 | 9.999 11481 | 48 | 30 |    |
|      | 40 | 9.323 5848 | 977 | 9.333 4632 | 1034  | 0.667 3929 | 9.999 11436 | 48 | 20 |    |
|      | 50 | 9.323 6825 | 977 | 9.333 5664 | 1034  | 0.667 3046 | 9.999 11391 | 48 | 10 |    |
| 10   | 0  | 9.323 7801 | 977 | 9.333 6696 | 1034  | 0.667 2163 | 9.999 11346 | 48 | 0  | 50 |
|      | 10 | 9.323 8778 | 977 | 9.333 7728 | 1034  | 0.667 1280 | 9.999 11301 | 48 | 50 |    |



|    | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Con        | d. | "  |    |
|----|----|------------|-----|------------|-------|------------|------------|----|----|----|
| 10 | 0  | 9.323 7802 | 976 | 9.333 6463 | 1021  | 0.666 3537 | 9.990 1339 | 45 | 0  | 50 |
|    | 10 | 9.323 8778 | 977 | 9.333 7484 | 1022  | 0.666 2516 | 9.990 1294 | 45 | 50 |    |
|    | 20 | 9.323 9755 | 976 | 9.333 8506 | 1022  | 0.666 1494 | 9.990 1249 | 45 | 40 |    |
|    | 30 | 9.324 0731 | 976 | 9.333 9528 | 1021  | 0.666 0472 | 9.990 1203 | 45 | 30 |    |
|    | 40 | 9.324 1707 | 975 | 9.334 0549 | 1021  | 0.665 9451 | 9.990 1158 | 45 | 20 |    |
|    | 50 | 9.324 2682 | 975 | 9.334 1570 | 1021  | 0.665 8430 | 9.990 1112 | 45 | 10 |    |
| 11 | 0  | 9.324 3657 | 976 | 9.334 2591 | 1020  | 0.665 7409 | 9.990 1067 | 46 | 0  | 49 |
|    | 10 | 9.324 4633 | 974 | 9.334 3611 | 1020  | 0.665 6389 | 9.990 1021 | 45 | 50 |    |
|    | 20 | 9.324 5607 | 975 | 9.334 4631 | 1021  | 0.665 5369 | 9.990 0976 | 45 | 40 |    |
|    | 30 | 9.324 6582 | 974 | 9.334 5652 | 1019  | 0.665 4348 | 9.990 0930 | 45 | 30 |    |
|    | 40 | 9.324 7556 | 975 | 9.334 6671 | 1020  | 0.665 3329 | 9.990 0885 | 45 | 20 |    |
|    | 50 | 9.324 8531 | 974 | 9.334 7691 | 1020  | 0.665 2309 | 9.990 0839 | 45 | 10 |    |
| 12 | 0  | 9.324 9505 | 973 | 9.334 8711 | 1019  | 0.665 1289 | 9.990 0794 | 46 | 0  | 48 |
|    | 10 | 9.325 0478 | 974 | 9.334 9730 | 1019  | 0.665 0270 | 9.990 0748 | 45 | 50 |    |
|    | 20 | 9.325 1452 | 973 | 9.335 0749 | 1019  | 0.664 9251 | 9.990 0703 | 45 | 40 |    |
|    | 30 | 9.325 2425 | 973 | 9.335 1768 | 1018  | 0.664 8232 | 9.990 0657 | 45 | 30 |    |
|    | 40 | 9.325 3398 | 973 | 9.335 2786 | 1019  | 0.664 7214 | 9.990 0612 | 45 | 20 |    |
|    | 50 | 9.325 4371 | 973 | 9.335 3805 | 1018  | 0.664 6195 | 9.990 0566 | 45 | 10 |    |
| 13 | 0  | 9.325 5344 | 972 | 9.335 4823 | 1018  | 0.664 5177 | 9.990 0521 | 46 | 0  | 47 |
|    | 10 | 9.325 6316 | 972 | 9.335 5841 | 1018  | 0.664 4159 | 9.990 0475 | 46 | 50 |    |
|    | 20 | 9.325 7288 | 972 | 9.335 6859 | 1017  | 0.664 3141 | 9.990 0429 | 45 | 40 |    |
|    | 30 | 9.325 8260 | 972 | 9.335 7876 | 1017  | 0.664 2124 | 9.990 0384 | 46 | 30 |    |
|    | 40 | 9.325 9132 | 971 | 9.335 8893 | 1017  | 0.664 1107 | 9.990 0338 | 45 | 20 |    |
|    | 50 | 9.326 0223 | 971 | 9.335 9910 | 1017  | 0.664 0090 | 9.990 0293 | 46 | 10 |    |
| 14 | 0  | 9.326 1174 | 971 | 9.336 0927 | 1017  | 0.663 9073 | 9.990 0247 | 46 | 0  | 46 |
|    | 10 | 9.326 2145 | 971 | 9.336 1944 | 1016  | 0.663 8056 | 9.990 0201 | 45 | 50 |    |
|    | 20 | 9.326 3116 | 971 | 9.336 2960 | 1017  | 0.663 7040 | 9.990 0156 | 45 | 40 |    |
|    | 30 | 9.326 4087 | 971 | 9.336 3977 | 1016  | 0.663 6023 | 9.990 0110 | 46 | 30 |    |
|    | 40 | 9.326 5057 | 970 | 9.336 4993 | 1015  | 0.663 5007 | 9.990 0064 | 45 | 20 |    |
|    | 50 | 9.326 6027 | 970 | 9.336 6008 | 1016  | 0.663 3992 | 9.990 0019 | 46 | 10 |    |
| 15 | 0  | 9.326 6997 | 969 | 9.336 7024 | 1015  | 0.663 2976 | 9.989 9973 | 46 | 0  | 45 |
|    | 10 | 9.326 7966 | 970 | 9.336 8039 | 1015  | 0.663 1961 | 9.989 9927 | 46 | 50 |    |
|    | 20 | 9.326 8936 | 969 | 9.336 9054 | 1015  | 0.663 0946 | 9.989 9881 | 45 | 40 |    |
|    | 30 | 9.326 9905 | 969 | 9.337 0069 | 1015  | 0.662 9931 | 9.989 9836 | 46 | 30 |    |
|    | 40 | 9.327 0874 | 968 | 9.337 1084 | 1015  | 0.662 8916 | 9.989 9790 | 46 | 20 |    |
|    | 50 | 9.327 1843 | 968 | 9.337 2099 | 1014  | 0.662 7901 | 9.989 9744 | 46 | 10 |    |
| 16 | 0  | 9.327 2811 | 968 | 9.337 3113 | 1014  | 0.662 6887 | 9.989 9698 | 45 | 0  | 44 |
|    | 10 | 9.327 3779 | 969 | 9.337 4127 | 1014  | 0.662 5873 | 9.989 9653 | 46 | 50 |    |
|    | 20 | 9.327 4748 | 967 | 9.337 5141 | 1013  | 0.662 4859 | 9.989 9607 | 46 | 40 |    |
|    | 30 | 9.327 5715 | 968 | 9.337 6154 | 1014  | 0.662 3846 | 9.989 9561 | 46 | 30 |    |
|    | 40 | 9.327 6683 | 967 | 9.337 7168 | 1013  | 0.662 2832 | 9.989 9515 | 46 | 20 |    |
|    | 50 | 9.327 7650 | 967 | 9.337 8181 | 1013  | 0.662 1819 | 9.989 9469 | 46 | 10 |    |
| 17 | 0  | 9.327 8617 | 967 | 9.337 9194 | 1013  | 0.662 0806 | 9.989 9423 | 45 | 0  | 43 |
|    | 10 | 9.327 9584 | 967 | 9.338 0207 | 1012  | 0.661 9793 | 9.989 9378 | 46 | 50 |    |
|    | 20 | 9.328 0551 | 967 | 9.338 1219 | 1013  | 0.661 8781 | 9.989 9332 | 46 | 40 |    |
|    | 30 | 9.328 1518 | 966 | 9.338 2232 | 1012  | 0.661 7768 | 9.989 9286 | 46 | 30 |    |
|    | 40 | 9.328 2484 | 966 | 9.338 3244 | 1012  | 0.661 6756 | 9.989 9240 | 46 | 20 |    |
|    | 50 | 9.328 3450 | 966 | 9.338 4256 | 1011  | 0.661 5744 | 9.989 9194 | 46 | 10 |    |
| 18 | 0  | 9.328 4416 | 965 | 9.338 5267 | 1012  | 0.661 4733 | 9.989 9148 | 46 | 0  | 42 |
|    | 10 | 9.328 5381 | 965 | 9.338 6279 | 1011  | 0.661 3721 | 9.989 9102 | 46 | 50 |    |
|    | 20 | 9.328 6346 | 966 | 9.338 7290 | 1011  | 0.661 2710 | 9.989 9056 | 46 | 40 |    |
|    | 30 | 9.328 7312 | 964 | 9.338 8301 | 1011  | 0.661 1699 | 9.989 9010 | 45 | 30 |    |
|    | 40 | 9.328 8276 | 965 | 9.338 9312 | 1011  | 0.661 0688 | 9.989 8965 | 46 | 20 |    |
|    | 50 | 9.328 9241 | 965 | 9.339 0323 | 1010  | 0.660 9677 | 9.989 8919 | 46 | 10 |    |
| 19 | 0  | 9.329 0206 | 964 | 9.339 1333 | 1010  | 0.660 8667 | 9.989 8873 | 46 | 0  | 41 |
|    | 10 | 9.329 1170 | 964 | 9.339 2343 | 1010  | 0.660 7657 | 9.989 8827 | 46 | 50 |    |
|    | 20 | 9.329 2134 | 964 | 9.339 3353 | 1010  | 0.660 6647 | 9.989 8781 | 46 | 40 |    |
|    | 30 | 9.329 3098 | 963 | 9.339 4363 | 1009  | 0.660 5637 | 9.989 8735 | 46 | 30 |    |
|    | 40 | 9.329 4061 | 963 | 9.339 5372 | 1010  | 0.660 4628 | 9.989 8689 | 46 | 20 |    |
|    | 50 | 9.329 5024 | 964 | 9.339 6382 | 1009  | 0.660 3618 | 9.989 8643 | 46 | 10 |    |
| 20 | 0  | 9.329 5988 |     | 9.339 7391 |       | 0.660 2609 | 9.989 8597 |    | 0  | 40 |

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| i  | n  | Sin        | d.  | Tang       | d. c. | Cotg       | Con        | d. | n  | i  |
|----|----|------------|-----|------------|-------|------------|------------|----|----|----|
| 20 | 0  | 9.329 5988 | 962 | 9.339 7391 | 1609  | 0.660 2609 | 9.989 8597 | 46 | 0  | 40 |
|    | 10 | 9.329 6950 | 963 | 9.339 8400 | 1609  | 0.660 1600 | 9.989 8551 | 47 | 50 |    |
|    | 20 | 9.329 7913 | 962 | 9.339 9409 | 1608  | 0.660 0591 | 9.989 8504 | 48 | 40 |    |
|    | 30 | 9.329 8875 | 961 | 9.340 0417 | 1608  | 0.659 9581 | 9.989 8458 | 49 | 30 |    |
|    | 40 | 9.329 9838 | 962 | 9.340 1425 | 1608  | 0.659 8571 | 9.989 8412 | 50 | 20 |    |
|    | 50 | 9.330 0800 | 961 | 9.340 2433 | 1608  | 0.659 7562 | 9.989 8366 | 46 | 10 |    |
| 21 | 0  | 9.330 1761 | 962 | 9.340 3441 | 1608  | 0.659 6552 | 9.989 8320 | 46 | 0  | 39 |
|    | 10 | 9.330 2723 | 961 | 9.340 4449 | 1607  | 0.659 5541 | 9.989 8274 | 46 | 50 |    |
|    | 20 | 9.330 3685 | 961 | 9.340 5456 | 1608  | 0.659 4531 | 9.989 8228 | 46 | 40 |    |
|    | 30 | 9.330 4645 | 961 | 9.340 6464 | 1607  | 0.659 3520 | 9.989 8182 | 46 | 30 |    |
|    | 40 | 9.330 5606 | 961 | 9.340 7471 | 1606  | 0.659 2510 | 9.989 8136 | 46 | 20 |    |
|    | 50 | 9.330 6567 | 960 | 9.340 8477 | 1607  | 0.659 1500 | 9.989 8090 | 47 | 10 |    |
| 22 | 0  | 9.330 7527 | 960 | 9.340 9484 | 1606  | 0.659 0490 | 9.989 8044 | 46 | 0  | 38 |
|    | 10 | 9.330 8487 | 960 | 9.341 0490 | 1606  | 0.658 9480 | 9.989 7998 | 46 | 50 |    |
|    | 20 | 9.330 9447 | 960 | 9.341 1496 | 1606  | 0.658 8470 | 9.989 7952 | 46 | 40 |    |
|    | 30 | 9.331 0407 | 960 | 9.341 2502 | 1606  | 0.658 7460 | 9.989 7906 | 46 | 30 |    |
|    | 40 | 9.331 1367 | 959 | 9.341 3508 | 1606  | 0.658 6450 | 9.989 7860 | 47 | 20 |    |
|    | 50 | 9.331 2326 | 959 | 9.341 4514 | 1605  | 0.658 5440 | 9.989 7814 | 46 | 10 |    |
| 23 | 0  | 9.331 3285 | 959 | 9.341 5519 | 1605  | 0.658 4430 | 9.989 7768 | 46 | 0  | 37 |
|    | 10 | 9.331 4244 | 959 | 9.341 6524 | 1605  | 0.658 3420 | 9.989 7722 | 46 | 50 |    |
|    | 20 | 9.331 5203 | 958 | 9.341 7529 | 1605  | 0.658 2410 | 9.989 7676 | 47 | 40 |    |
|    | 30 | 9.331 6161 | 958 | 9.341 8534 | 1605  | 0.658 1400 | 9.989 7630 | 46 | 30 |    |
|    | 40 | 9.331 7119 | 958 | 9.341 9538 | 1604  | 0.658 0390 | 9.989 7584 | 46 | 20 |    |
|    | 50 | 9.331 8077 | 958 | 9.342 0543 | 1604  | 0.657 9380 | 9.989 7538 | 46 | 10 |    |
| 24 | 0  | 9.331 9035 | 958 | 9.342 1546 | 1604  | 0.657 8370 | 9.989 7492 | 47 | 0  | 36 |
|    | 10 | 9.331 9993 | 957 | 9.342 2550 | 1604  | 0.657 7360 | 9.989 7446 | 46 | 50 |    |
|    | 20 | 9.332 0950 | 957 | 9.342 3554 | 1604  | 0.657 6350 | 9.989 7400 | 46 | 40 |    |
|    | 30 | 9.332 1907 | 957 | 9.342 4557 | 1604  | 0.657 5340 | 9.989 7354 | 46 | 30 |    |
|    | 40 | 9.332 2864 | 957 | 9.342 5560 | 1603  | 0.657 4330 | 9.989 7308 | 47 | 20 |    |
|    | 50 | 9.332 3820 | 957 | 9.342 6564 | 1603  | 0.657 3320 | 9.989 7262 | 46 | 10 |    |
| 25 | 0  | 9.332 4777 | 956 | 9.342 7566 | 1603  | 0.657 2310 | 9.989 7216 | 47 | 0  | 35 |
|    | 10 | 9.332 5733 | 956 | 9.342 8569 | 1603  | 0.657 1300 | 9.989 7170 | 46 | 50 |    |
|    | 20 | 9.332 6689 | 956 | 9.342 9571 | 1603  | 0.657 0290 | 9.989 7124 | 46 | 40 |    |
|    | 30 | 9.332 7645 | 955 | 9.343 0574 | 1603  | 0.656 9280 | 9.989 7078 | 47 | 30 |    |
|    | 40 | 9.332 8600 | 955 | 9.343 1576 | 1603  | 0.656 8270 | 9.989 7032 | 46 | 20 |    |
|    | 50 | 9.332 9556 | 955 | 9.343 2577 | 1602  | 0.656 7260 | 9.989 6986 | 47 | 10 |    |
| 26 | 0  | 9.333 0511 | 955 | 9.343 3578 | 1602  | 0.656 6250 | 9.989 6940 | 46 | 0  | 34 |
|    | 10 | 9.333 1466 | 954 | 9.343 4579 | 1602  | 0.656 5240 | 9.989 6894 | 47 | 50 |    |
|    | 20 | 9.333 2420 | 954 | 9.343 5580 | 1602  | 0.656 4230 | 9.989 6848 | 46 | 40 |    |
|    | 30 | 9.333 3375 | 954 | 9.343 6581 | 1602  | 0.656 3220 | 9.989 6802 | 46 | 30 |    |
|    | 40 | 9.333 4329 | 954 | 9.343 7581 | 1601  | 0.656 2210 | 9.989 6756 | 47 | 20 |    |
|    | 50 | 9.333 5283 | 954 | 9.343 8582 | 1601  | 0.656 1200 | 9.989 6710 | 46 | 10 |    |
| 27 | 0  | 9.333 6237 | 953 | 9.343 9582 | 1601  | 0.656 0190 | 9.989 6664 | 47 | 0  | 33 |
|    | 10 | 9.333 7190 | 953 | 9.344 0583 | 1601  | 0.655 9180 | 9.989 6618 | 46 | 50 |    |
|    | 20 | 9.333 8144 | 953 | 9.344 1583 | 1601  | 0.655 8170 | 9.989 6572 | 46 | 40 |    |
|    | 30 | 9.333 9097 | 953 | 9.344 2584 | 1601  | 0.655 7160 | 9.989 6526 | 47 | 30 |    |
|    | 40 | 9.334 0050 | 953 | 9.344 3584 | 1600  | 0.655 6150 | 9.989 6480 | 46 | 20 |    |
|    | 50 | 9.334 1003 | 953 | 9.344 4584 | 1600  | 0.655 5140 | 9.989 6434 | 47 | 10 |    |
| 28 | 0  | 9.334 1955 | 952 | 9.344 5584 | 1600  | 0.655 4130 | 9.989 6388 | 46 | 0  | 32 |
|    | 10 | 9.334 2907 | 952 | 9.344 6584 | 1599  | 0.655 3120 | 9.989 6342 | 47 | 50 |    |
|    | 20 | 9.334 3859 | 952 | 9.344 7584 | 1599  | 0.655 2110 | 9.989 6296 | 46 | 40 |    |
|    | 30 | 9.334 4811 | 952 | 9.344 8584 | 1599  | 0.655 1100 | 9.989 6250 | 46 | 30 |    |
|    | 40 | 9.334 5763 | 951 | 9.344 9584 | 1598  | 0.655 0090 | 9.989 6204 | 47 | 20 |    |
|    | 50 | 9.334 6714 | 951 | 9.345 0584 | 1598  | 0.654 9080 | 9.989 6158 | 46 | 10 |    |
| 29 | 0  | 9.334 7665 | 951 | 9.345 1584 | 1598  | 0.654 8070 | 9.989 6112 | 47 | 0  | 31 |
|    | 10 | 9.334 8616 | 951 | 9.345 2584 | 1597  | 0.654 7060 | 9.989 6066 | 46 | 50 |    |
|    | 20 | 9.334 9567 | 950 | 9.345 3584 | 1597  | 0.654 6050 | 9.989 6020 | 46 | 40 |    |
|    | 30 | 9.335 0517 | 951 | 9.345 4584 | 1597  | 0.654 5040 | 9.989 5974 | 47 | 30 |    |
|    | 40 | 9.335 1468 | 951 | 9.345 5584 | 1597  | 0.654 4030 | 9.989 5928 | 46 | 20 |    |
|    | 50 | 9.335 2418 | 950 | 9.345 6584 | 1596  | 0.654 3020 | 9.989 5882 | 47 | 10 |    |
| 30 | 0  | 9.335 3368 | 950 | 9.345 7584 | 1596  | 0.654 2010 | 9.989 5836 | 46 | 0  | 30 |
| i  | n  | Con        | d.  | Cotg       | d. c. | Tang       | Sin        | d. | n  | i  |



|    | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d. | "  |    |
|----|----|------------|-----|------------|-------|------------|------------|----|----|----|
| 30 | o  | 9.335 3368 | 949 | 9.345 7552 | 997   | 0.654 2448 | 9.989 5815 | 47 | o  | 30 |
|    | 10 | 9.335 4317 | 950 | 9.345 8549 | 996   | 0.654 1451 | 9.989 5768 | 46 | 50 |    |
|    | 20 | 9.335 5267 | 949 | 9.345 9545 | 996   | 0.654 0455 | 9.989 5722 | 47 | 30 |    |
|    | 30 | 9.335 6216 | 949 | 9.346 0541 | 995   | 0.653 9459 | 9.989 5675 | 47 | 40 |    |
|    | 40 | 9.335 7165 | 948 | 9.346 1536 | 996   | 0.653 8464 | 9.989 5628 | 46 | 10 |    |
|    | 50 | 9.335 8113 | 949 | 9.346 2532 | 995   | 0.653 7468 | 9.989 5582 | 47 | 20 |    |
| 31 | o  | 9.335 9062 | 948 | 9.346 3527 | 995   | 0.653 6473 | 9.989 5535 | 47 | o  | 29 |
|    | 10 | 9.336 0010 | 948 | 9.346 4522 | 995   | 0.653 5478 | 9.989 5488 | 47 | 50 |    |
|    | 20 | 9.336 0958 | 948 | 9.346 5517 | 995   | 0.653 4483 | 9.989 5441 | 46 | 40 |    |
|    | 30 | 9.336 1906 | 948 | 9.346 6512 | 994   | 0.653 3488 | 9.989 5395 | 47 | 30 |    |
|    | 40 | 9.336 2854 | 947 | 9.346 7506 | 994   | 0.653 2494 | 9.989 5348 | 47 | 20 |    |
|    | 50 | 9.336 3801 | 948 | 9.346 8500 | 994   | 0.653 1500 | 9.989 5301 | 47 | 10 |    |
| 32 | o  | 9.336 4749 | 947 | 9.346 9494 | 994   | 0.653 0506 | 9.989 5254 | 47 | o  | 28 |
|    | 10 | 9.336 5696 | 947 | 9.347 0488 | 994   | 0.652 9512 | 9.989 5207 | 46 | 50 |    |
|    | 20 | 9.336 6643 | 946 | 9.347 1482 | 993   | 0.652 8518 | 9.989 5161 | 47 | 40 |    |
|    | 30 | 9.336 7589 | 946 | 9.347 2475 | 994   | 0.652 7525 | 9.989 5114 | 47 | 30 |    |
|    | 40 | 9.336 8535 | 947 | 9.347 3469 | 993   | 0.652 6531 | 9.989 5067 | 47 | 20 |    |
|    | 50 | 9.336 9482 | 946 | 9.347 4462 | 992   | 0.652 5538 | 9.989 5020 | 47 | 10 |    |
| 33 | o  | 9.337 0428 | 945 | 9.347 5454 | 993   | 0.652 4546 | 9.989 4973 | 47 | o  | 27 |
|    | 10 | 9.337 1373 | 946 | 9.347 6447 | 992   | 0.652 3553 | 9.989 4926 | 47 | 50 |    |
|    | 20 | 9.337 2319 | 945 | 9.347 7439 | 993   | 0.652 2561 | 9.989 4879 | 46 | 40 |    |
|    | 30 | 9.337 3264 | 945 | 9.347 8432 | 992   | 0.652 1568 | 9.989 4833 | 47 | 30 |    |
|    | 40 | 9.337 4209 | 945 | 9.347 9424 | 991   | 0.652 0576 | 9.989 4786 | 47 | 20 |    |
|    | 50 | 9.337 5154 | 945 | 9.348 0415 | 992   | 0.651 9585 | 9.989 4739 | 47 | 10 |    |
| 34 | o  | 9.337 6099 | 944 | 9.348 1407 | 991   | 0.651 8593 | 9.989 4692 | 47 | o  | 26 |
|    | 10 | 9.337 7043 | 944 | 9.348 2398 | 991   | 0.651 7602 | 9.989 4645 | 47 | 50 |    |
|    | 20 | 9.337 7987 | 944 | 9.348 3389 | 991   | 0.651 6611 | 9.989 4598 | 47 | 40 |    |
|    | 30 | 9.337 8931 | 944 | 9.348 4380 | 991   | 0.651 5620 | 9.989 4551 | 47 | 30 |    |
|    | 40 | 9.337 9875 | 944 | 9.348 5371 | 991   | 0.651 4629 | 9.989 4504 | 47 | 20 |    |
|    | 50 | 9.338 0819 | 943 | 9.348 6362 | 990   | 0.651 3638 | 9.989 4457 | 47 | 10 |    |
| 35 | o  | 9.338 1762 | 943 | 9.348 7352 | 990   | 0.651 2648 | 9.989 4410 | 47 | o  | 25 |
|    | 10 | 9.338 2705 | 943 | 9.348 8342 | 990   | 0.651 1658 | 9.989 4363 | 47 | 50 |    |
|    | 20 | 9.338 3648 | 943 | 9.348 9332 | 990   | 0.651 0668 | 9.989 4316 | 47 | 40 |    |
|    | 30 | 9.338 4591 | 942 | 9.349 0322 | 989   | 0.650 9678 | 9.989 4269 | 47 | 30 |    |
|    | 40 | 9.338 5533 | 943 | 9.349 1311 | 990   | 0.650 8689 | 9.989 4222 | 47 | 20 |    |
|    | 50 | 9.338 6476 | 942 | 9.349 2301 | 989   | 0.650 7699 | 9.989 4175 | 47 | 10 |    |
| 36 | o  | 9.338 7418 | 941 | 9.349 3290 | 989   | 0.650 6710 | 9.989 4128 | 47 | o  | 24 |
|    | 10 | 9.338 8359 | 942 | 9.349 4279 | 988   | 0.650 5721 | 9.989 4081 | 47 | 50 |    |
|    | 20 | 9.338 9301 | 942 | 9.349 5267 | 989   | 0.650 4733 | 9.989 4034 | 47 | 40 |    |
|    | 30 | 9.339 0243 | 941 | 9.349 6256 | 988   | 0.650 3744 | 9.989 3987 | 48 | 30 |    |
|    | 40 | 9.339 1184 | 941 | 9.349 7244 | 988   | 0.650 2756 | 9.989 3939 | 47 | 20 |    |
|    | 50 | 9.339 2125 | 940 | 9.349 8232 | 988   | 0.650 1768 | 9.989 3892 | 47 | 10 |    |
| 37 | o  | 9.339 3065 | 941 | 9.349 9220 | 988   | 0.650 0780 | 9.989 3845 | 47 | o  | 23 |
|    | 10 | 9.339 4006 | 940 | 9.350 0208 | 987   | 0.649 9792 | 9.989 3798 | 47 | 50 |    |
|    | 20 | 9.339 4946 | 941 | 9.350 1195 | 988   | 0.649 8805 | 9.989 3751 | 47 | 40 |    |
|    | 30 | 9.339 5887 | 939 | 9.350 2183 | 987   | 0.649 7817 | 9.989 3704 | 47 | 30 |    |
|    | 40 | 9.339 6826 | 940 | 9.350 3170 | 987   | 0.649 6830 | 9.989 3657 | 48 | 20 |    |
|    | 50 | 9.339 7766 | 940 | 9.350 4157 | 986   | 0.649 5843 | 9.989 3609 | 47 | 10 |    |
| 38 | o  | 9.339 8706 | 939 | 9.350 5143 | 987   | 0.649 4857 | 9.989 3562 | 47 | o  | 22 |
|    | 10 | 9.339 9645 | 939 | 9.350 6130 | 986   | 0.649 3870 | 9.989 3515 | 47 | 50 |    |
|    | 20 | 9.340 0584 | 939 | 9.350 7116 | 986   | 0.649 2884 | 9.989 3468 | 47 | 40 |    |
|    | 30 | 9.340 1523 | 939 | 9.350 8102 | 986   | 0.649 1898 | 9.989 3421 | 48 | 30 |    |
|    | 40 | 9.340 2462 | 938 | 9.350 9088 | 986   | 0.649 0912 | 9.989 3373 | 47 | 20 |    |
|    | 50 | 9.340 3400 | 938 | 9.351 0074 | 985   | 0.648 9926 | 9.989 3326 | 47 | 10 |    |
| 39 | o  | 9.340 4338 | 938 | 9.351 1059 | 986   | 0.648 8941 | 9.989 3279 | 47 | o  | 21 |
|    | 10 | 9.340 5276 | 938 | 9.351 2045 | 985   | 0.648 7955 | 9.989 3232 | 48 | 50 |    |
|    | 20 | 9.340 6214 | 938 | 9.351 3030 | 984   | 0.648 6970 | 9.989 3184 | 47 | 40 |    |
|    | 30 | 9.340 7152 | 937 | 9.351 4014 | 985   | 0.648 5986 | 9.989 3137 | 47 | 30 |    |
|    | 40 | 9.340 8089 | 937 | 9.351 4999 | 985   | 0.648 5001 | 9.989 3090 | 48 | 20 |    |
|    | 50 | 9.340 9026 | 937 | 9.351 5984 | 984   | 0.648 4016 | 9.989 3042 | 47 | 10 |    |
| 40 | o  | 9.340 9963 | 937 | 9.351 6968 |       | 0.648 3032 | 9.989 2995 | 47 | o  | 20 |

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|    |    | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d. |    |    |         |
|----|----|------------|-----|------------|-------|------------|------------|----|----|----|---------|
| 50 | o  | 9.346 5794 | 924 | 9.357 5658 | 972   | 0.642 4342 | 9.989 0137 | 48 | o  | 10 | 970     |
|    | 10 | 9.346 6718 | 924 | 9.357 6630 | 972   | 0.642 3370 | 9.989 0089 | 48 | 50 |    | 1 97.0  |
|    | 20 | 9.346 7642 | 924 | 9.357 7602 | 971   | 0.642 2398 | 9.989 0041 | 48 | 40 |    | 2 194.0 |
|    | 30 | 9.346 8566 | 923 | 9.357 8573 | 972   | 0.642 1427 | 9.988 9993 | 48 | 30 |    | 3 291.0 |
|    | 40 | 9.346 9489 | 924 | 9.357 9545 | 971   | 0.642 0455 | 9.988 9945 | 48 | 20 |    | 4 388.0 |
|    | 50 | 9.347 0413 | 923 | 9.358 0516 | 971   | 0.641 9484 | 9.988 9897 | 48 | 10 |    | 5 485.0 |
| 51 | o  | 9.347 1336 | 923 | 9.358 1487 | 971   | 0.641 8513 | 9.988 9849 | 48 | o  | 9  | 6 582.0 |
|    | 10 | 9.347 2259 | 923 | 9.358 2458 | 971   | 0.641 7542 | 9.988 9801 | 48 | 50 |    | 7 679.0 |
|    | 20 | 9.347 3182 | 922 | 9.358 3429 | 971   | 0.641 6571 | 9.988 9753 | 48 | 40 |    | 8 776.0 |
|    | 30 | 9.347 4104 | 922 | 9.358 4400 | 970   | 0.641 5600 | 9.988 9704 | 48 | 30 |    | 9 873.0 |
|    | 40 | 9.347 5026 | 922 | 9.358 5370 | 970   | 0.641 4630 | 9.988 9656 | 48 | 20 |    |         |
|    | 50 | 9.347 5948 | 922 | 9.358 6340 | 970   | 0.641 3660 | 9.988 9608 | 48 | 10 |    |         |
| 52 | o  | 9.347 6870 | 922 | 9.358 7310 | 970   | 0.641 2690 | 9.988 9560 | 48 | o  | 8  | 965     |
|    | 10 | 9.347 7792 | 921 | 9.358 8280 | 969   | 0.641 1720 | 9.988 9512 | 48 | 50 |    | 1 96.5  |
|    | 20 | 9.347 8713 | 922 | 9.358 9249 | 970   | 0.641 0751 | 9.988 9464 | 48 | 40 |    | 2 193.0 |
|    | 30 | 9.347 9635 | 921 | 9.359 0219 | 969   | 0.640 9781 | 9.988 9416 | 48 | 30 |    | 3 289.5 |
|    | 40 | 9.348 0556 | 921 | 9.359 1188 | 969   | 0.640 8812 | 9.988 9368 | 48 | 20 |    | 4 386.0 |
|    | 50 | 9.348 1477 | 920 | 9.359 2157 | 969   | 0.640 7843 | 9.988 9320 | 48 | 10 |    | 5 482.5 |
| 53 | o  | 9.348 2397 | 921 | 9.359 3126 | 968   | 0.640 6874 | 9.988 9271 | 48 | o  | 7  | 6 579.0 |
|    | 10 | 9.348 3318 | 920 | 9.359 4094 | 969   | 0.640 5906 | 9.988 9223 | 48 | 50 |    | 8 676.5 |
|    | 20 | 9.348 4238 | 920 | 9.359 5063 | 968   | 0.640 4937 | 9.988 9175 | 48 | 40 |    | 9 868.5 |
|    | 30 | 9.348 5158 | 920 | 9.359 6031 | 968   | 0.640 3969 | 9.988 9127 | 48 | 30 |    |         |
|    | 40 | 9.348 6078 | 920 | 9.359 6999 | 968   | 0.640 3001 | 9.988 9079 | 48 | 20 |    |         |
|    | 50 | 9.348 6998 | 919 | 9.359 7967 | 968   | 0.640 2033 | 9.988 9031 | 48 | 10 |    |         |
| 54 | o  | 9.348 7917 | 919 | 9.359 8935 | 967   | 0.640 1065 | 9.988 8982 | 48 | o  | 6  | 960     |
|    | 10 | 9.348 8836 | 919 | 9.359 9902 | 967   | 0.640 0098 | 9.988 8934 | 48 | 50 |    | 1 96.0  |
|    | 20 | 9.348 9755 | 919 | 9.360 0869 | 967   | 0.639 9131 | 9.988 8886 | 48 | 40 |    | 2 192.0 |
|    | 30 | 9.349 0674 | 919 | 9.360 1836 | 967   | 0.639 8164 | 9.988 8838 | 48 | 30 |    | 3 288.0 |
|    | 40 | 9.349 1593 | 918 | 9.360 2803 | 967   | 0.639 7197 | 9.988 8789 | 48 | 20 |    | 4 384.9 |
|    | 50 | 9.349 2511 | 918 | 9.360 3770 | 966   | 0.639 6230 | 9.988 8741 | 48 | 10 |    | 5 480.0 |
| 55 | o  | 9.349 3429 | 918 | 9.360 4736 | 967   | 0.639 5264 | 9.988 8693 | 49 | o  | 5  | 6 576.0 |
|    | 10 | 9.349 4347 | 918 | 9.360 5703 | 966   | 0.639 4297 | 9.988 8644 | 48 | 50 |    | 8 672.4 |
|    | 20 | 9.349 5265 | 918 | 9.360 6669 | 966   | 0.639 3331 | 9.988 8596 | 48 | 40 |    | 9       |



| $r$     | $n$ | Sin        | d.  | Tang       | d. c. | Cotg       | Con        | d. | $n$ | $r$ |
|---------|-----|------------|-----|------------|-------|------------|------------|----|-----|-----|
| 060     | 0   | 9.352 0880 | 912 | 9.361 3641 | 961   | 0.636 6159 | 9.988 7229 | 48 | 0   | 60  |
| 1 96.0  | 10  | 9.352 1792 | 912 | 9.361 4602 | 961   | 0.636 5198 | 9.988 7101 | 49 | 50  |     |
| 2 191.0 | 20  | 9.352 2704 | 911 | 9.361 5562 | 960   | 0.636 4238 | 9.988 7144 | 49 | 40  |     |
| 3 288.0 | 30  | 9.352 3615 | 911 | 9.361 6522 | 960   | 0.636 3278 | 9.988 7091 | 49 | 30  |     |
| 4 384.0 | 40  | 9.352 4527 | 911 | 9.361 7482 | 960   | 0.636 2318 | 9.988 7013 | 48 | 20  |     |
| 5 480.0 | 50  | 9.352 5438 | 911 | 9.361 8442 | 960   | 0.636 1358 | 9.988 6996 | 49 | 10  |     |
| 6 576.0 | 0   | 9.352 6349 | 910 | 9.361 9402 | 960   | 0.636 0399 | 9.988 6937 | 48 | 0   | 59  |
| 7 672.0 | 10  | 9.352 7259 | 910 | 9.361 0361 | 959   | 0.635 9439 | 9.988 6899 | 49 | 50  |     |
| 8 768.0 | 20  | 9.352 8170 | 910 | 9.361 1320 | 959   | 0.635 8479 | 9.988 6855 | 49 | 40  |     |
| 9 864.0 | 30  | 9.352 9080 | 910 | 9.361 2279 | 959   | 0.635 7519 | 9.988 6811 | 49 | 30  |     |
|         | 40  | 9.352 9990 | 910 | 9.361 3238 | 959   | 0.635 6559 | 9.988 6763 | 48 | 20  |     |
|         | 50  | 9.353 0900 | 910 | 9.361 4196 | 959   | 0.635 5599 | 9.988 6724 | 49 | 10  |     |
| 065     | 0   | 9.353 1810 | 9-9 | 9.361 5155 | 958   | 0.635 4639 | 9.988 6685 | 49 | 0   | 58  |
| 1 95.5  | 10  | 9.353 2719 | 910 | 9.361 6114 | 958   | 0.635 3679 | 9.988 6646 | 48 | 50  |     |
| 2 191.0 | 20  | 9.353 3629 | 9-9 | 9.361 7072 | 958   | 0.635 2719 | 9.988 6607 | 49 | 40  |     |
| 3 286.5 | 30  | 9.353 4538 | 9-9 | 9.361 8030 | 958   | 0.635 1759 | 9.988 6568 | 49 | 30  |     |
| 4 382.0 | 40  | 9.353 5447 | 9-9 | 9.361 8988 | 957   | 0.635 0799 | 9.988 6529 | 49 | 20  |     |
| 5 477.5 | 50  | 9.353 6356 | 9-9 | 9.361 9946 | 957   | 0.634 9839 | 9.988 6490 | 49 | 10  |     |
| 6 573.0 | 0   | 9.353 7265 | 9-8 | 9.362 0904 | 957   | 0.634 8879 | 9.988 6451 | 48 | 0   | 57  |
| 7 668.5 | 10  | 9.353 8174 | 9-8 | 9.362 1862 | 957   | 0.634 7919 | 9.988 6412 | 49 | 50  |     |
| 8 764.0 | 20  | 9.353 9083 | 9-8 | 9.362 2820 | 957   | 0.634 6959 | 9.988 6373 | 49 | 40  |     |
| 9 859.5 | 30  | 9.353 9992 | 9-8 | 9.362 3778 | 957   | 0.634 5999 | 9.988 6334 | 49 | 30  |     |
|         | 40  | 9.354 0901 | 9-8 | 9.362 4736 | 956   | 0.634 5039 | 9.988 6295 | 49 | 20  |     |
|         | 50  | 9.354 1810 | 9-7 | 9.362 5694 | 956   | 0.634 4079 | 9.988 6256 | 49 | 10  |     |
| 060     | 0   | 9.354 2719 | 9-8 | 9.362 6652 | 956   | 0.634 3119 | 9.988 6217 | 48 | 0   | 56  |
| 1 95.0  | 10  | 9.354 3628 | 9-6 | 9.362 7610 | 956   | 0.634 2159 | 9.988 6178 | 49 | 50  |     |
| 2 190.0 | 20  | 9.354 4537 | 9-7 | 9.362 8568 | 955   | 0.634 1199 | 9.988 6139 | 49 | 40  |     |
| 3 285.0 | 30  | 9.354 5446 | 9-7 | 9.362 9526 | 955   | 0.634 0239 | 9.988 6100 | 49 | 30  |     |
| 4 380.0 | 40  | 9.354 6355 | 9-7 | 9.363 0484 | 955   | 0.633 9279 | 9.988 6061 | 49 | 20  |     |
| 5 475.0 | 50  | 9.354 7264 | 9-6 | 9.363 1442 | 955   | 0.633 8319 | 9.988 6022 | 49 | 10  |     |
| 6 570.0 | 0   | 9.354 8173 | 9-6 | 9.363 2400 | 955   | 0.633 7359 | 9.988 5983 | 49 | 0   | 55  |
| 7 665.0 | 10  | 9.354 9082 | 9-6 | 9.363 3358 | 955   | 0.633 6399 | 9.988 5944 | 49 | 50  |     |
| 8 760.0 | 20  | 9.354 9991 | 9-6 | 9.363 4316 | 955   | 0.633 5439 | 9.988 5905 | 49 | 40  |     |
| 9 855.0 | 30  | 9.355 0900 | 9-6 | 9.363 5274 | 955   | 0.633 4479 | 9.988 5866 | 49 | 30  |     |
|         | 40  | 9.355 1809 | 9-6 | 9.363 6232 | 955   | 0.633 3519 | 9.988 5827 | 49 | 20  |     |
|         | 50  | 9.355 2718 | 9-6 | 9.363 7190 | 955   | 0.633 2559 | 9.988 5788 | 49 | 10  |     |
| 065     | 0   | 9.355 3627 | 9-6 | 9.363 8148 | 955   | 0.633 1599 | 9.988 5749 | 49 | 0   | 54  |
| 1 94.5  | 10  | 9.355 4536 | 9-5 | 9.363 9106 | 954   | 0.633 0639 | 9.988 5710 | 49 | 50  |     |
| 2 190.0 | 20  | 9.355 5445 | 9-5 | 9.364 0064 | 954   | 0.632 9679 | 9.988 5671 | 49 | 40  |     |
| 3 285.0 | 30  | 9.355 6354 | 9-5 | 9.364 1022 | 954   | 0.632 8719 | 9.988 5632 | 49 | 30  |     |
| 4 380.0 | 40  | 9.355 7263 | 9-5 | 9.364 1980 | 954   | 0.632 7759 | 9.988 5593 | 49 | 20  |     |
| 5 475.0 | 50  | 9.355 8172 | 9-5 | 9.364 2938 | 954   | 0.632 6799 | 9.988 5554 | 49 | 10  |     |
| 6 570.0 | 0   | 9.355 9081 | 9-5 | 9.364 3896 | 954   | 0.632 5839 | 9.988 5515 | 49 | 0   | 53  |
| 7 665.0 | 10  | 9.355 9990 | 9-5 | 9.364 4854 | 954   | 0.632 4879 | 9.988 5476 | 49 | 50  |     |
| 8 760.0 | 20  | 9.356 0900 | 9-5 | 9.364 5812 | 954   | 0.632 3919 | 9.988 5437 | 49 | 40  |     |
| 9 855.0 | 30  | 9.356 1809 | 9-5 | 9.364 6770 | 954   | 0.632 2959 | 9.988 5398 | 49 | 30  |     |
|         | 40  | 9.356 2718 | 9-5 | 9.364 7728 | 954   | 0.632 1999 | 9.988 5359 | 49 | 20  |     |
|         | 50  | 9.356 3627 | 9-5 | 9.364 8686 | 954   | 0.632 1039 | 9.988 5320 | 49 | 10  |     |
| 060     | 0   | 9.356 4536 | 9-5 | 9.364 9644 | 954   | 0.632 0079 | 9.988 5281 | 49 | 0   | 52  |
| 1 94.0  | 10  | 9.356 5445 | 9-5 | 9.365 0602 | 954   | 0.631 9119 | 9.988 5242 | 49 | 50  |     |
| 2 189.0 | 20  | 9.356 6354 | 9-5 | 9.365 1560 | 954   | 0.631 8159 | 9.988 5203 | 49 | 40  |     |
| 3 284.0 | 30  | 9.356 7263 | 9-5 | 9.365 2518 | 954   | 0.631 7199 | 9.988 5164 | 49 | 30  |     |
| 4 379.0 | 40  | 9.356 8172 | 9-5 | 9.365 3476 | 954   | 0.631 6239 | 9.988 5125 | 49 | 20  |     |
| 5 474.0 | 50  | 9.356 9081 | 9-5 | 9.365 4434 | 954   | 0.631 5279 | 9.988 5086 | 49 | 10  |     |
| 6 569.0 | 0   | 9.356 9990 | 9-5 | 9.365 5392 | 954   | 0.631 4319 | 9.988 5047 | 49 | 0   | 51  |
| 7 664.0 | 10  | 9.357 0900 | 9-5 | 9.365 6350 | 954   | 0.631 3359 | 9.988 5008 | 49 | 50  |     |
| 8 759.0 | 20  | 9.357 1809 | 9-5 | 9.365 7308 | 954   | 0.631 2399 | 9.988 4969 | 49 | 40  |     |
| 9 854.0 | 30  | 9.357 2718 | 9-5 | 9.365 8266 | 954   | 0.631 1439 | 9.988 4930 | 49 | 30  |     |
|         | 40  | 9.357 3627 | 9-5 | 9.365 9224 | 954   | 0.631 0479 | 9.988 4891 | 49 | 20  |     |
|         | 50  | 9.357 4536 | 9-5 | 9.366 0182 | 954   | 0.630 9519 | 9.988 4852 | 49 | 10  |     |
| 065     | 0   | 9.357 5445 | 9-5 | 9.366 1140 | 954   | 0.630 8559 | 9.988 4813 | 49 | 0   | 50  |
| 1 93.5  | 10  | 9.357 6354 | 9-5 | 9.366 2098 | 954   | 0.630 7599 | 9.988 4774 | 49 | 50  |     |
| 2 189.0 | 20  | 9.357 7263 | 9-5 | 9.366 3056 | 954   | 0.630 6639 | 9.988 4735 | 49 | 40  |     |
| 3 284.0 | 30  | 9.357 8172 | 9-5 | 9.366 4014 | 954   | 0.630 5679 | 9.988 4696 | 49 | 30  |     |
| 4 379.0 | 40  | 9.357 9081 | 9-5 | 9.366 4972 | 954   | 0.630 4719 | 9.988 4657 | 49 | 20  |     |
| 5 474.0 | 50  | 9.358 0000 | 9-5 | 9.366 5930 | 954   | 0.630 3759 | 9.988 4618 | 49 | 10  |     |
| 6 569.0 | 0   | 9.358 0909 | 9-5 | 9.366 6888 | 954   | 0.630 2799 | 9.988 4579 | 49 | 0   | 49  |
| 7 664.0 | 10  | 9.358 1818 | 9-5 | 9.366 7846 | 954   | 0.630 1839 | 9.988 4540 | 49 | 50  |     |
| 8 759.0 | 20  | 9.358 2727 | 9-5 | 9.366 8804 | 954   | 0.630 0879 | 9.988 4501 | 49 | 40  |     |
| 9 854.0 | 30  | 9.358 3636 | 9-5 | 9.366 9762 | 954   | 0.629 9919 | 9.988 4462 | 49 | 30  |     |
|         | 40  | 9.358 4545 | 9-5 | 9.367 0720 | 954   | 0.629 8959 | 9.988 4423 | 49 | 20  |     |
|         | 50  | 9.358 5454 | 9-5 | 9.367 1678 | 954   | 0.629 7999 | 9.988 4384 | 49 | 10  |     |
|         | 0   | 9.358 6363 | 9-5 | 9.367 2636 | 954   | 0.629 7039 | 9.988 4345 | 49 | 0   | 48  |



|    | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d. | "  |    |
|----|----|------------|-----|------------|-------|------------|------------|----|----|----|
| 10 | 0  | 9.357 5240 | 900 | 9.369 0937 | 949   | 0.630 9063 | 9.988 4303 | 49 | 0  | 50 |
|    | 10 | 9.357 6140 | 900 | 9.369 1886 | 949   | 0.630 8114 | 9.988 4254 | 49 | 50 |    |
|    | 20 | 9.357 7040 | 900 | 9.369 2835 | 949   | 0.630 7165 | 9.988 4205 | 49 | 40 |    |
|    | 30 | 9.357 7940 | 899 | 9.369 3784 | 949   | 0.630 6216 | 9.988 4156 | 49 | 30 |    |
|    | 40 | 9.357 8839 | 899 | 9.369 4733 | 948   | 0.630 5267 | 9.988 4106 | 49 | 20 |    |
|    | 50 | 9.357 9738 | 899 | 9.369 5681 | 948   | 0.630 4319 | 9.988 4057 | 49 | 10 |    |
| 11 | 0  | 9.358 0637 | 899 | 9.369 6629 | 948   | 0.630 3371 | 9.988 4008 | 50 | 0  | 49 |
|    | 10 | 9.358 1536 | 898 | 9.369 7577 | 948   | 0.630 2423 | 9.988 3958 | 49 | 50 |    |
|    | 20 | 9.358 2434 | 899 | 9.369 8525 | 948   | 0.630 1475 | 9.988 3909 | 49 | 40 |    |
|    | 30 | 9.358 3333 | 898 | 9.369 9473 | 948   | 0.630 0527 | 9.988 3860 | 49 | 30 |    |
|    | 40 | 9.358 4231 | 898 | 9.370 0421 | 947   | 0.629 9579 | 9.988 3810 | 49 | 20 |    |
|    | 50 | 9.358 5129 | 898 | 9.370 1368 | 947   | 0.629 8632 | 9.988 3761 | 49 | 10 |    |
| 12 | 0  | 9.358 6027 | 897 | 9.370 2315 | 947   | 0.629 7685 | 9.988 3712 | 50 | 0  | 48 |
|    | 10 | 9.358 6924 | 898 | 9.370 3262 | 947   | 0.629 6738 | 9.988 3662 | 49 | 50 |    |
|    | 20 | 9.358 7822 | 897 | 9.370 4209 | 947   | 0.629 5791 | 9.988 3613 | 49 | 40 |    |
|    | 30 | 9.358 8719 | 897 | 9.370 5156 | 946   | 0.629 4844 | 9.988 3563 | 49 | 30 |    |
|    | 40 | 9.358 9616 | 897 | 9.370 6102 | 946   | 0.629 3898 | 9.988 3514 | 49 | 20 |    |
|    | 50 | 9.359 0513 | 896 | 9.370 7048 | 946   | 0.629 2952 | 9.988 3464 | 49 | 10 |    |
| 13 | 0  | 9.359 1409 | 897 | 9.370 7994 | 946   | 0.629 2006 | 9.988 3415 | 49 | 0  | 47 |
|    | 10 | 9.359 2306 | 896 | 9.370 8940 | 946   | 0.629 1060 | 9.988 3366 | 50 | 50 |    |
|    | 20 | 9.359 3202 | 896 | 9.370 9886 | 945   | 0.629 0114 | 9.988 3316 | 49 | 40 |    |
|    | 30 | 9.359 4098 | 896 | 9.371 0831 | 946   | 0.628 9169 | 9.988 3267 | 50 | 30 |    |
|    | 40 | 9.359 4994 | 896 | 9.371 1777 | 945   | 0.628 8223 | 9.988 3217 | 49 | 20 |    |
|    | 50 | 9.359 5890 | 895 | 9.371 2722 | 945   | 0.628 7278 | 9.988 3168 | 50 | 10 |    |
| 14 | 0  | 9.359 6785 | 895 | 9.371 3667 | 945   | 0.628 6333 | 9.988 3118 | 49 | 0  | 46 |
|    | 10 | 9.359 7680 | 895 | 9.371 4612 | 944   | 0.628 5388 | 9.988 3069 | 50 | 50 |    |
|    | 20 | 9.359 8575 | 895 | 9.371 5556 | 944   | 0.628 4444 | 9.988 3019 | 49 | 40 |    |
|    | 30 | 9.359 9470 | 895 | 9.371 6501 | 944   | 0.628 3499 | 9.988 2970 | 50 | 30 |    |
|    | 40 | 9.360 0365 | 894 | 9.371 7445 | 944   | 0.628 2555 | 9.988 2920 | 50 | 20 |    |
|    | 50 | 9.360 1259 | 895 | 9.371 8389 | 944   | 0.628 1611 | 9.988 2870 | 49 | 10 |    |
| 15 | 0  | 9.360 2154 | 894 | 9.371 9333 | 943   | 0.628 0667 | 9.988 2821 | 50 | 0  | 45 |
|    | 10 | 9.360 3048 | 894 | 9.372 0276 | 944   | 0.627 9724 | 9.988 2771 | 49 | 50 |    |
|    | 20 | 9.360 3942 | 893 | 9.372 1220 | 943   | 0.627 8780 | 9.988 2722 | 50 | 40 |    |
|    | 30 | 9.360 4835 | 894 | 9.372 2163 | 943   | 0.627 7837 | 9.988 2672 | 50 | 30 |    |
|    | 40 | 9.360 5729 | 893 | 9.372 3106 | 943   | 0.627 6894 | 9.988 2622 | 49 | 20 |    |
|    | 50 | 9.360 6622 | 893 | 9.372 4049 | 943   | 0.627 5951 | 9.988 2573 | 49 | 10 |    |
| 16 | 0  | 9.360 7515 | 893 | 9.372 4992 | 942   | 0.627 5008 | 9.988 2523 | 49 | 0  | 44 |
|    | 10 | 9.360 8408 | 893 | 9.372 5934 | 943   | 0.627 4066 | 9.988 2474 | 50 | 50 |    |
|    | 20 | 9.360 9301 | 892 | 9.372 6877 | 942   | 0.627 3123 | 9.988 2424 | 50 | 40 |    |
|    | 30 | 9.361 0193 | 893 | 9.372 7819 | 942   | 0.627 2181 | 9.988 2374 | 49 | 30 |    |
|    | 40 | 9.361 1086 | 892 | 9.372 8761 | 942   | 0.627 1239 | 9.988 2325 | 50 | 20 |    |
|    | 50 | 9.361 1978 | 892 | 9.372 9703 | 942   | 0.627 0297 | 9.988 2275 | 50 | 10 |    |
| 17 | 0  | 9.361 2870 | 892 | 9.373 0645 | 941   | 0.626 9355 | 9.988 2225 | 50 | 0  | 43 |
|    | 10 | 9.361 3762 | 891 | 9.373 1586 | 941   | 0.626 8414 | 9.988 2175 | 49 | 50 |    |
|    | 20 | 9.361 4653 | 891 | 9.373 2527 | 941   | 0.626 7473 | 9.988 2126 | 50 | 40 |    |
|    | 30 | 9.361 5544 | 892 | 9.373 3468 | 941   | 0.626 6532 | 9.988 2076 | 50 | 30 |    |
|    | 40 | 9.361 6436 | 891 | 9.373 4409 | 941   | 0.626 5591 | 9.988 2026 | 50 | 20 |    |
|    | 50 | 9.361 7327 | 890 | 9.373 5350 | 941   | 0.626 4650 | 9.988 1976 | 49 | 10 |    |
| 18 | 0  | 9.361 8217 | 891 | 9.373 6291 | 940   | 0.626 3709 | 9.988 1927 | 50 | 0  | 42 |
|    | 10 | 9.361 9108 | 890 | 9.373 7231 | 940   | 0.626 2769 | 9.988 1877 | 50 | 50 |    |
|    | 20 | 9.361 9998 | 891 | 9.373 8171 | 940   | 0.626 1829 | 9.988 1827 | 50 | 40 |    |
|    | 30 | 9.362 0889 | 890 | 9.373 9111 | 940   | 0.626 0889 | 9.988 1777 | 49 | 30 |    |
|    | 40 | 9.362 1779 | 889 | 9.374 0051 | 940   | 0.625 9949 | 9.988 1728 | 50 | 20 |    |
|    | 50 | 9.362 2668 | 890 | 9.374 0991 | 939   | 0.625 9009 | 9.988 1678 | 50 | 10 |    |
| 19 | 0  | 9.362 3558 | 890 | 9.374 1930 | 940   | 0.625 8070 | 9.988 1628 | 50 | 0  | 41 |
|    | 10 | 9.362 4448 | 889 | 9.374 2870 | 939   | 0.625 7130 | 9.988 1578 | 50 | 50 |    |
|    | 20 | 9.362 5337 | 889 | 9.374 3809 | 939   | 0.625 6191 | 9.988 1528 | 50 | 40 |    |
|    | 30 | 9.362 6226 | 889 | 9.374 4748 | 939   | 0.625 5252 | 9.988 1478 | 50 | 30 |    |
|    | 40 | 9.362 7115 | 888 | 9.374 5686 | 938   | 0.625 4314 | 9.988 1428 | 49 | 20 |    |
|    | 50 | 9.362 8003 | 889 | 9.374 6625 | 938   | 0.625 3375 | 9.988 1379 | 50 | 10 |    |
| 20 | 0  | 9.362 8892 |     | 9.374 7563 |       | 0.625 2437 | 9.988 1329 |    | 0  | 40 |
|    | "  | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d. | "  |    |

945  
1 94.5  
2 189.0  
3 283.5  
4 378.0  
5 472.5  
6 567.0  
7 661.5  
8 756.0  
9 850.5

940  
1 94.0  
2 188.0  
3 282.0  
4 376.0  
5 470.0  
6 564.0  
7 658.0  
8 752.0  
9 846.0

900  
1 90.0  
2 180.0  
3 270.0  
4 360.0  
5 450.0  
6 540.0  
7 630.0  
8 720.0  
9 810.0

895  
1 89.5  
2 179.0  
3 268.5  
4 358.0  
5 447.5  
6 537.0  
7 626.5  
8 716.0  
9 805.5

890  
1 89.0  
2 178.0  
3 267.0  
4 356.0  
5 445.0  
6 534.0  
7 623.0  
8 712.0  
9 801.0

80  
1 5.0  
2 10.0  
3 15.0  
4 20.0  
5 25.0  
6 30.0  
7 35.0  
8 40.0  
9 45.0



|         |    |            | sin | d.         | Tang | d. c.      | Cotg       | Cos | d. |    |  |
|---------|----|------------|-----|------------|------|------------|------------|-----|----|----|--|
| 035     | 0  | 9.162 8892 | 888 | 9.174 7561 | 918  | 0.655 1147 | 9.981 1430 | 5.1 | 0  | 40 |  |
| 1 07.5  | 10 | 9.162 9780 | 888 | 9.174 8504 | 918  | 0.655 1147 | 9.981 1430 | 5.1 | 50 |    |  |
| 2 167.0 | 20 | 9.163 0668 | 888 | 9.174 9449 | 918  | 0.655 1147 | 9.981 1430 | 5.1 | 40 |    |  |
| 3 186.5 | 30 | 9.163 1556 | 888 | 9.175 0397 | 918  | 0.655 1147 | 9.981 1430 | 5.1 | 30 |    |  |
| 4 174.0 | 40 | 9.163 2444 | 887 | 9.175 1345 | 917  | 0.655 1147 | 9.981 1430 | 5.1 | 20 |    |  |
| 5 162.5 | 50 | 9.163 3331 | 888 | 9.175 2293 | 918  | 0.655 1147 | 9.981 1430 | 5.1 | 10 |    |  |
| 6 167.0 | 0  | 9.163 4219 | 887 | 9.175 3240 | 917  | 0.655 1147 | 9.981 1430 | 5.1 | 0  | 30 |  |
| 7 154.5 | 10 | 9.163 5106 | 887 | 9.175 4187 | 917  | 0.655 1147 | 9.981 1430 | 5.1 | 50 |    |  |
| 8 146.0 | 20 | 9.163 5994 | 887 | 9.175 5134 | 917  | 0.655 1147 | 9.981 1430 | 5.1 | 40 |    |  |
| 9 141.5 | 30 | 9.163 6881 | 886 | 9.175 6081 | 917  | 0.655 1147 | 9.981 1430 | 5.1 | 30 |    |  |
|         | 40 | 9.163 7766 | 887 | 9.175 6917 | 916  | 0.655 1147 | 9.981 1430 | 5.1 | 20 |    |  |
|         | 50 | 9.163 8654 | 886 | 9.175 7811 | 917  | 0.655 1147 | 9.981 1430 | 5.1 | 10 |    |  |
| 030     | 0  | 9.163 9540 | 886 | 9.175 8700 | 916  | 0.655 1147 | 9.981 1430 | 5.1 | 0  | 38 |  |
| 1 025.0 | 10 | 9.163 0425 | 886 | 9.175 9594 | 916  | 0.655 1147 | 9.981 1430 | 5.1 | 50 |    |  |
| 2 116.0 | 20 | 9.163 1311 | 885 | 9.176 0482 | 915  | 0.655 1147 | 9.981 1430 | 5.1 | 40 |    |  |
| 3 112.0 | 30 | 9.163 2196 | 886 | 9.176 1371 | 915  | 0.655 1147 | 9.981 1430 | 5.1 | 30 |    |  |
| 4 108.0 | 40 | 9.163 3083 | 885 | 9.176 2261 | 915  | 0.655 1147 | 9.981 1430 | 5.1 | 20 |    |  |
| 5 104.0 | 50 | 9.163 3967 | 885 | 9.176 3151 | 915  | 0.655 1147 | 9.981 1430 | 5.1 | 10 |    |  |
| 6 101.0 | 0  | 9.163 4852 | 885 | 9.176 4041 | 915  | 0.655 1147 | 9.981 1430 | 5.1 | 0  | 37 |  |
| 7 99.0  | 10 | 9.163 5737 | 884 | 9.176 4931 | 915  | 0.655 1147 | 9.981 1430 | 5.1 | 50 |    |  |
| 8 97.0  | 20 | 9.163 6621 | 884 | 9.176 5821 | 915  | 0.655 1147 | 9.981 1430 | 5.1 | 40 |    |  |
| 9 95.0  | 30 | 9.163 7506 | 884 | 9.176 6711 | 915  | 0.655 1147 | 9.981 1430 | 5.1 | 30 |    |  |
| 090     | 40 | 9.163 8391 | 883 | 9.176 7601 | 915  | 0.655 1147 | 9.981 1430 | 5.1 | 20 |    |  |
| 1 87.0  | 50 | 9.163 9274 | 883 | 9.176 8491 | 915  | 0.655 1147 | 9.981 1430 | 5.1 | 10 |    |  |
| 2 176.0 | 0  | 9.163 0158 | 883 | 9.176 9381 | 915  | 0.655 1147 | 9.981 1430 | 5.1 | 0  | 36 |  |
| 3 167.0 | 10 | 9.163 1043 | 883 | 9.177 0271 | 915  | 0.655 1147 | 9.981 1430 | 5.1 | 50 |    |  |
| 4 159.0 | 20 | 9.163 1928 | 883 | 9.177 1161 | 915  | 0.655 1147 | 9.981 1430 | 5.1 | 40 |    |  |
| 5 151.0 | 30 | 9.163 2813 | 883 | 9.177 2051 | 915  | 0.655 1147 | 9.981 1430 | 5.1 | 30 |    |  |
| 6 143.0 | 40 | 9.163 3698 | 883 | 9.177 2941 | 915  | 0.655 1147 | 9.981 1430 | 5.1 | 20 |    |  |
| 7 135.0 | 50 | 9.163 4583 | 883 | 9.177 3831 | 915  | 0.655 1147 | 9.981 1430 | 5.1 | 10 |    |  |
| 8 131.0 | 0  | 9.163 5468 | 883 | 9.177 4721 | 915  | 0.655 1147 | 9.981 1430 | 5.1 | 0  | 35 |  |
| 9 127.0 | 10 | 9.163 6353 | 883 | 9.177 5611 | 915  | 0.655 1147 | 9.981 1430 | 5.1 | 50 |    |  |
| 085     | 20 | 9.163 7238 | 883 | 9.177 6501 | 915  | 0.655 1147 | 9.981 1430 | 5.1 | 40 |    |  |
| 1 172.0 | 30 | 9.163 8123 | 883 | 9.177 7391 | 915  | 0.655 1147 | 9.981 1430 | 5.1 | 30 |    |  |
| 2 165.5 | 40 | 9.163 9008 | 883 | 9.177 8281 | 915  | 0.655 1147 | 9.981 1430 | 5.1 | 20 |    |  |
| 3 159.0 | 50 | 9.163 9893 | 883 | 9.177 9171 | 915  | 0.655 1147 | 9.981 1430 | 5.1 | 10 |    |  |
| 4 151.5 | 0  | 9.163 0778 | 883 | 9.178 0061 | 915  | 0.655 1147 | 9.981 1430 | 5.1 | 0  | 34 |  |
| 5 144.0 | 10 | 9.163 1663 | 883 | 9.178 0951 | 915  | 0.655 1147 | 9.981 1430 | 5.1 | 50 |    |  |
| 6 136.5 | 20 | 9.163 2548 | 883 | 9.178 1841 | 915  | 0.655 1147 | 9.981 1430 | 5.1 | 40 |    |  |
| 7 129.0 | 30 | 9.163 3433 | 883 | 9.178 2731 | 915  | 0.655 1147 | 9.981 1430 | 5.1 | 30 |    |  |
| 8 126.5 | 40 | 9.163 4318 | 883 | 9.178 3621 | 915  | 0.655 1147 | 9.981 1430 | 5.1 | 20 |    |  |
| 9 124.0 | 50 | 9.163 5203 | 883 | 9.178 4511 | 915  | 0.655 1147 | 9.981 1430 | 5.1 | 10 |    |  |
| 080     | 0  | 9.163 6088 | 883 | 9.178 5401 | 915  | 0.655 1147 | 9.981 1430 | 5.1 | 0  | 33 |  |
| 1 81.0  | 10 | 9.163 6973 | 883 | 9.178 6291 | 915  | 0.655 1147 | 9.981 1430 | 5.1 | 50 |    |  |
| 2 176.0 | 20 | 9.163 7858 | 883 | 9.178 7181 | 915  | 0.655 1147 | 9.981 1430 | 5.1 | 40 |    |  |
| 3 164.5 | 30 | 9.163 8743 | 883 | 9.178 8071 | 915  | 0.655 1147 | 9.981 1430 | 5.1 | 30 |    |  |
| 4 158.0 | 40 | 9.163 9628 | 883 | 9.178 8961 | 915  | 0.655 1147 | 9.981 1430 | 5.1 | 20 |    |  |
| 5 150.5 | 50 | 9.163 0513 | 883 | 9.178 9851 | 915  | 0.655 1147 | 9.981 1430 | 5.1 | 10 |    |  |
| 6 143.0 | 0  | 9.163 1398 | 883 | 9.179 0741 | 915  | 0.655 1147 | 9.981 1430 | 5.1 | 0  | 32 |  |
| 7 135.5 | 10 | 9.163 2283 | 883 | 9.179 1631 | 915  | 0.655 1147 | 9.981 1430 | 5.1 | 50 |    |  |
| 8 128.0 | 20 | 9.163 3168 | 883 | 9.179 2521 | 915  | 0.655 1147 | 9.981 1430 | 5.1 | 40 |    |  |
| 9 120.5 | 30 | 9.163 4053 | 883 | 9.179 3411 | 915  | 0.655 1147 | 9.981 1430 | 5.1 | 30 |    |  |
| 075     | 40 | 9.163 4938 | 883 | 9.179 4301 | 915  | 0.655 1147 | 9.981 1430 | 5.1 | 20 |    |  |
| 1 70.0  | 50 | 9.163 5823 | 883 | 9.179 5191 | 915  | 0.655 1147 | 9.981 1430 | 5.1 | 10 |    |  |
| 2 62.5  | 0  | 9.163 6708 | 883 | 9.179 6081 | 915  | 0.655 1147 | 9.981 1430 | 5.1 | 0  | 31 |  |
| 3 55.0  | 10 | 9.163 7593 | 883 | 9.179 6971 | 915  | 0.655 1147 | 9.981 1430 | 5.1 | 50 |    |  |
| 4 47.5  | 20 | 9.163 8478 | 883 | 9.179 7861 | 915  | 0.655 1147 | 9.981 1430 | 5.1 | 40 |    |  |
| 5 40.0  | 30 | 9.163 9363 | 883 | 9.179 8751 | 915  | 0.655 1147 | 9.981 1430 | 5.1 | 30 |    |  |
| 6 32.5  | 40 | 9.163 0248 | 883 | 9.179 9641 | 915  | 0.655 1147 | 9.981 1430 | 5.1 | 20 |    |  |
| 7 25.0  | 50 | 9.163 1133 | 883 | 9.180 0531 | 915  | 0.655 1147 | 9.981 1430 | 5.1 | 10 |    |  |
| 8 17.5  | 0  | 9.163 2018 | 883 | 9.180 1421 | 915  | 0.655 1147 | 9.981 1430 | 5.1 | 0  | 30 |  |
| 9 10.0  | 10 | 9.163 2903 | 883 | 9.180 2311 | 915  | 0.655 1147 | 9.981 1430 | 5.1 | 50 |    |  |
| 070     | 20 | 9.163 3788 | 883 | 9.180 3201 | 915  | 0.655 1147 | 9.981 1430 | 5.1 | 40 |    |  |
| 1 2.5   | 30 | 9.163 4673 | 883 | 9.180 4091 | 915  | 0.655 1147 | 9.981 1430 | 5.1 | 30 |    |  |
| 2 15.0  | 40 | 9.163 5558 | 883 | 9.180 4981 | 915  | 0.655 1147 | 9.981 1430 | 5.1 | 20 |    |  |
| 3 7.5   | 50 | 9.163 6443 | 883 | 9.180 5871 | 915  | 0.655 1147 | 9.981 1430 | 5.1 | 10 |    |  |
| 4 0.0   | 0  | 9.163 7328 | 883 | 9.180 6761 | 915  | 0.655 1147 | 9.981 1430 | 5.1 | 0  | 29 |  |
| 5 15.0  | 10 | 9.163 8213 | 883 | 9.180 7651 | 915  | 0.655 1147 | 9.981 1430 | 5.1 | 50 |    |  |
| 6 30.0  | 20 | 9.163 9098 | 883 | 9.180 8541 | 915  | 0.655 1147 | 9.981 1430 | 5.1 | 40 |    |  |
| 7 45.0  | 30 | 9.163 9983 | 883 | 9.180 9431 | 915  | 0.655 1147 | 9.981 1430 | 5.1 | 30 |    |  |
| 8 60.0  | 40 | 9.163 0868 | 883 | 9.181 0321 | 915  | 0.655 1147 | 9.981 1430 | 5.1 | 20 |    |  |
| 9 75.0  | 50 | 9.163 1753 | 883 | 9.181 1211 | 915  | 0.655 1147 | 9.981 1430 | 5.1 | 10 |    |  |
|         | 0  | 9.163 2638 | 883 | 9.181 2101 | 915  | 0.655 1147 | 9.981 1430 | 5.1 | 0  | 28 |  |



|    | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d. | "  |    |
|----|----|------------|-----|------------|-------|------------|------------|----|----|----|
| 30 | 0  | 9.368 1853 | 876 | 9.380 3537 | 928   | 0.619 6463 | 9.987 8315 | 50 | 0  | 30 |
|    | 10 | 9.368 2729 |     | 9.380 4465 | 927   | 0.619 5535 | 9.987 8265 | 51 | 50 |    |
|    | 20 | 9.368 3606 | 877 | 9.380 5392 | 927   | 0.619 4608 | 9.987 8214 | 51 | 40 |    |
|    | 30 | 9.368 4483 | 877 | 9.380 6319 | 927   | 0.619 3681 | 9.987 8163 | 51 | 30 |    |
|    | 40 | 9.368 5359 | 876 | 9.380 7246 | 927   | 0.619 2754 | 9.987 8113 | 51 | 20 |    |
|    | 50 | 9.368 6235 | 876 | 9.380 8173 | 927   | 0.619 1827 | 9.987 8062 | 51 | 10 |    |
| 31 | 0  | 9.368 7111 | 876 | 9.380 9100 | 926   | 0.619 0900 | 9.987 8012 | 51 | 0  | 29 |
|    | 10 | 9.368 7987 | 876 | 9.381 0026 | 926   | 0.618 9974 | 9.987 7961 | 51 | 50 |    |
|    | 20 | 9.368 8863 | 875 | 9.381 0952 | 926   | 0.618 9048 | 9.987 7910 | 51 | 40 |    |
|    | 30 | 9.368 9738 | 875 | 9.381 1878 | 926   | 0.618 8122 | 9.987 7860 | 51 | 30 |    |
|    | 40 | 9.369 0613 | 875 | 9.381 2804 | 926   | 0.618 7196 | 9.987 7809 | 51 | 20 |    |
|    | 50 | 9.369 1488 | 875 | 9.381 3730 | 925   | 0.618 6270 | 9.987 7758 | 51 | 10 |    |
| 32 | 0  | 9.369 2363 | 875 | 9.381 4655 | 925   | 0.618 5345 | 9.987 7708 | 51 | 0  | 28 |
|    | 10 | 9.369 3238 | 874 | 9.381 5581 | 925   | 0.618 4419 | 9.987 7657 | 51 | 50 |    |
|    | 20 | 9.369 4112 | 874 | 9.381 6506 | 925   | 0.618 3494 | 9.987 7606 | 51 | 40 |    |
|    | 30 | 9.369 4987 | 874 | 9.381 7431 | 925   | 0.618 2569 | 9.987 7556 | 51 | 30 |    |
|    | 40 | 9.369 5861 | 873 | 9.381 8356 | 924   | 0.618 1644 | 9.987 7505 | 51 | 20 |    |
|    | 50 | 9.369 6735 | 873 | 9.381 9280 | 925   | 0.618 0720 | 9.987 7454 | 51 | 10 |    |
| 33 | 0  | 9.369 7608 | 874 | 9.382 0205 | 924   | 0.617 9795 | 9.987 7404 | 51 | 0  | 27 |
|    | 10 | 9.369 8482 | 873 | 9.382 1129 | 924   | 0.617 8871 | 9.987 7353 | 51 | 50 |    |
|    | 20 | 9.369 9355 | 874 | 9.382 2053 | 924   | 0.617 7947 | 9.987 7302 | 51 | 40 |    |
|    | 30 | 9.370 0229 | 873 | 9.382 2977 | 924   | 0.617 7023 | 9.987 7251 | 51 | 30 |    |
|    | 40 | 9.370 1102 | 872 | 9.382 3901 | 924   | 0.617 6099 | 9.987 7200 | 51 | 20 |    |
|    | 50 | 9.370 1974 | 872 | 9.382 4825 | 923   | 0.617 5175 | 9.987 7150 | 51 | 10 |    |
| 34 | 0  | 9.370 2847 | 872 | 9.382 5748 | 923   | 0.617 4252 | 9.987 7099 | 51 | 0  | 26 |
|    | 10 | 9.370 3719 | 873 | 9.382 6671 | 924   | 0.617 3329 | 9.987 7048 | 51 | 50 |    |
|    | 20 | 9.370 4592 | 872 | 9.382 7595 | 922   | 0.617 2405 | 9.987 6997 | 51 | 40 |    |
|    | 30 | 9.370 5464 | 872 | 9.382 8517 | 923   | 0.617 1483 | 9.987 6946 | 51 | 30 |    |
|    | 40 | 9.370 6336 | 871 | 9.382 9440 | 923   | 0.617 0560 | 9.987 6896 | 51 | 20 |    |
|    | 50 | 9.370 7207 | 872 | 9.383 0363 | 922   | 0.616 9637 | 9.987 6845 | 51 | 10 |    |
| 35 | 0  | 9.370 8079 | 871 | 9.383 1285 | 922   | 0.616 8715 | 9.987 6794 | 51 | 0  | 25 |
|    | 10 | 9.370 8950 | 871 | 9.383 2207 | 922   | 0.616 7793 | 9.987 6743 | 51 | 50 |    |
|    | 20 | 9.370 9821 | 871 | 9.383 3129 | 922   | 0.616 6871 | 9.987 6692 | 51 | 40 |    |
|    | 30 | 9.371 0692 | 871 | 9.383 4051 | 922   | 0.616 5949 | 9.987 6641 | 51 | 30 |    |
|    | 40 | 9.371 1563 | 871 | 9.383 4973 | 921   | 0.616 5027 | 9.987 6590 | 51 | 20 |    |
|    | 50 | 9.371 2434 | 870 | 9.383 5894 | 922   | 0.616 4106 | 9.987 6539 | 51 | 10 |    |
| 36 | 0  | 9.371 3304 | 870 | 9.383 6816 | 921   | 0.616 3184 | 9.987 6488 | 51 | 0  | 24 |
|    | 10 | 9.371 4174 | 870 | 9.383 7737 | 921   | 0.616 2263 | 9.987 6437 | 51 | 50 |    |
|    | 20 | 9.371 5044 | 870 | 9.383 8658 | 921   | 0.616 1342 | 9.987 6386 | 51 | 40 |    |
|    | 30 | 9.371 5914 | 870 | 9.383 9579 | 920   | 0.616 0421 | 9.987 6336 | 51 | 30 |    |
|    | 40 | 9.371 6784 | 869 | 9.384 0499 | 921   | 0.615 9501 | 9.987 6285 | 51 | 20 |    |
|    | 50 | 9.371 7653 | 870 | 9.384 1420 | 920   | 0.615 8580 | 9.987 6234 | 51 | 10 |    |
| 37 | 0  | 9.371 8523 | 869 | 9.384 2340 | 920   | 0.615 7660 | 9.987 6183 | 51 | 0  | 23 |
|    | 10 | 9.371 9392 | 869 | 9.384 3260 | 920   | 0.615 6740 | 9.987 6132 | 51 | 50 |    |
|    | 20 | 9.372 0261 | 869 | 9.384 4180 | 920   | 0.615 5820 | 9.987 6081 | 51 | 40 |    |
|    | 30 | 9.372 1130 | 868 | 9.384 5100 | 920   | 0.615 4900 | 9.987 6030 | 51 | 30 |    |
|    | 40 | 9.372 1998 | 869 | 9.384 6020 | 919   | 0.615 3980 | 9.987 5978 | 51 | 20 |    |
|    | 50 | 9.372 2867 | 868 | 9.384 6939 | 919   | 0.615 3061 | 9.987 5927 | 51 | 10 |    |
| 38 | 0  | 9.372 3735 | 868 | 9.384 7858 | 919   | 0.615 2142 | 9.987 5876 | 51 | 0  | 22 |
|    | 10 | 9.372 4603 | 868 | 9.384 8777 | 919   | 0.615 1223 | 9.987 5825 | 51 | 50 |    |
|    | 20 | 9.372 5471 | 867 | 9.384 9696 | 919   | 0.615 0304 | 9.987 5774 | 51 | 40 |    |
|    | 30 | 9.372 6338 | 868 | 9.385 0615 | 919   | 0.614 9385 | 9.987 5723 | 51 | 30 |    |
|    | 40 | 9.372 7206 | 867 | 9.385 1534 | 918   | 0.614 8466 | 9.987 5672 | 51 | 20 |    |
|    | 50 | 9.372 8073 | 867 | 9.385 2452 | 918   | 0.614 7548 | 9.987 5621 | 51 | 10 |    |
| 39 | 0  | 9.372 8940 | 867 | 9.385 3370 | 918   | 0.614 6630 | 9.987 5570 | 51 | 0  | 21 |
|    | 10 | 9.372 9807 | 867 | 9.385 4288 | 918   | 0.614 5712 | 9.987 5519 | 51 | 50 |    |
|    | 20 | 9.373 0674 | 866 | 9.385 5206 | 918   | 0.614 4794 | 9.987 5467 | 51 | 40 |    |
|    | 30 | 9.373 1540 | 867 | 9.385 6124 | 918   | 0.614 3876 | 9.987 5416 | 51 | 30 |    |
|    | 40 | 9.373 2407 | 866 | 9.385 7041 | 917   | 0.614 2959 | 9.987 5365 | 51 | 20 |    |
|    | 50 | 9.373 3273 | 866 | 9.385 7959 | 917   | 0.614 2041 | 9.987 5314 | 51 | 10 |    |
| 40 | 0  | 9.373 4139 |     | 9.385 8876 |       | 0.614 1124 | 9.987 5263 | 51 | 0  | 20 |
|    | "  | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d. | "  |    |

925  
1 92.5  
2 185.0  
3 277.5  
4 370.0  
5 462.5  
6 555.0  
7 647.5  
8 740.0  
9 832.5

920  
1 92.0  
2 184.0  
3 276.0  
4 368.0  
5 460.0  
6 552.0  
7 644.0  
8 736.0  
9 828.0

875  
1 87.5  
2 175.0  
3 262.5  
4 350.0  
5 437.5  
6 525.0  
7 612.5  
8 700.0  
9 787.5

870  
1 87.0  
2 174.0  
3 261.0  
4 348.0  
5 435.0  
6 522.0  
7 609.0  
8 696.0  
9 783.0

865  
1 86.5  
2 173.0  
3 259.5  
4 346.0  
5 432.5  
6 519.0  
7 605.5  
8 692.0  
9 778.5

861  
1 86.1  
2 172.2  
3 258.4  
4 345.2  
5 431.6  
6 518.0  
7 604.4  
8 691.2  
9 777.2



[illegible]



| i  | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d. | "  | i  |
|----|----|------------|-----|------------|-------|------------|------------|----|----|----|
| 50 | 0  | 9.378 5767 | 855 | 9.391 3595 | 907   | 0.608 6405 | 9.987 2171 | 51 | 0  | 10 |
|    | 10 | 9.378 6622 | 854 | 9.391 4502 | 907   | 0.608 5498 | 9.987 2120 | 52 | 50 |    |
|    | 20 | 9.378 7476 | 855 | 9.391 5409 | 906   | 0.608 4591 | 9.987 2068 | 52 | 40 |    |
|    | 30 | 9.378 8331 | 855 | 9.391 6315 | 907   | 0.608 3685 | 9.987 2016 | 52 | 30 |    |
|    | 40 | 9.378 9186 | 854 | 9.391 7222 | 906   | 0.608 2778 | 9.987 1964 | 52 | 20 |    |
|    | 50 | 9.379 0040 | 854 | 9.391 8128 | 906   | 0.608 1872 | 9.987 1912 | 52 | 10 |    |
| 51 | 0  | 9.379 0894 | 854 | 9.391 9034 | 906   | 0.608 0966 | 9.987 1860 | 52 | 0  | 9  |
|    | 10 | 9.379 1748 | 854 | 9.391 9940 | 905   | 0.608 0060 | 9.987 1808 | 52 | 50 |    |
|    | 20 | 9.379 2602 | 853 | 9.392 0845 | 906   | 0.607 9155 | 9.987 1756 | 52 | 40 |    |
|    | 30 | 9.379 3455 | 853 | 9.392 1751 | 905   | 0.607 8249 | 9.987 1704 | 52 | 30 |    |
|    | 40 | 9.379 4308 | 854 | 9.392 2656 | 905   | 0.607 7344 | 9.987 1652 | 52 | 20 |    |
|    | 50 | 9.379 5162 | 853 | 9.392 3561 | 905   | 0.607 6439 | 9.987 1601 | 52 | 10 |    |
| 52 | 0  | 9.379 6015 | 852 | 9.392 4466 | 905   | 0.607 5534 | 9.987 1549 | 52 | 0  | 8  |
|    | 10 | 9.379 6867 | 853 | 9.392 5371 | 905   | 0.607 4629 | 9.987 1497 | 52 | 50 |    |
|    | 20 | 9.379 7720 | 853 | 9.392 6276 | 904   | 0.607 3724 | 9.987 1445 | 52 | 40 |    |
|    | 30 | 9.379 8573 | 852 | 9.392 7180 | 904   | 0.607 2820 | 9.987 1393 | 52 | 30 |    |
|    | 40 | 9.379 9425 | 852 | 9.392 8084 | 905   | 0.607 1916 | 9.987 1341 | 52 | 20 |    |
|    | 50 | 9.380 0277 | 852 | 9.392 8989 | 904   | 0.607 1011 | 9.987 1289 | 53 | 10 |    |
| 53 | 0  | 9.380 1129 | 852 | 9.392 9893 | 903   | 0.607 0107 | 9.987 1236 | 52 | 0  | 7  |
|    | 10 | 9.380 1981 | 851 | 9.393 0796 | 904   | 0.606 9204 | 9.987 1184 | 52 | 50 |    |
|    | 20 | 9.380 2832 | 852 | 9.393 1700 | 904   | 0.606 8300 | 9.987 1132 | 52 | 40 |    |
|    | 30 | 9.380 3684 | 851 | 9.393 2604 | 903   | 0.606 7396 | 9.987 1080 | 52 | 30 |    |
|    | 40 | 9.380 4535 | 851 | 9.393 3507 | 903   | 0.606 6493 | 9.987 1028 | 52 | 20 |    |
|    | 50 | 9.380 5386 | 851 | 9.393 4410 | 903   | 0.606 5590 | 9.987 0976 | 52 | 10 |    |
| 54 | 0  | 9.380 6237 | 851 | 9.393 5313 | 903   | 0.606 4687 | 9.987 0924 | 52 | 0  | 6  |
|    | 10 | 9.380 7088 | 850 | 9.393 6216 | 902   | 0.606 3784 | 9.987 0872 | 52 | 50 |    |
|    | 20 | 9.380 7938 | 851 | 9.393 7118 | 903   | 0.606 2882 | 9.987 0820 | 52 | 40 |    |
|    | 30 | 9.380 8789 | 850 | 9.393 8021 | 902   | 0.606 1979 | 9.987 0768 | 52 | 30 |    |
|    | 40 | 9.380 9639 | 850 | 9.393 8923 | 902   | 0.606 1077 | 9.987 0716 | 52 | 20 |    |
|    | 50 | 9.381 0489 | 850 | 9.393 9825 | 902   | 0.606 0175 | 9.987 0663 | 53 | 10 |    |
| 55 | 0  | 9.381 1339 | 849 | 9.394 0727 | 902   | 0.605 9273 | 9.987 0611 | 52 | 0  | 5  |
|    | 10 | 9.381 2188 | 850 | 9.394 1629 | 902   | 0.605 8371 | 9.987 0559 | 52 | 50 |    |
|    | 20 | 9.381 3038 | 849 | 9.394 2531 | 901   | 0.605 7469 | 9.987 0507 | 52 | 40 |    |
|    | 30 | 9.381 3887 | 849 | 9.394 3432 | 902   | 0.605 6568 | 9.987 0455 | 52 | 30 |    |
|    | 40 | 9.381 4736 | 849 | 9.394 4334 | 901   | 0.605 5666 | 9.987 0402 | 52 | 20 |    |
|    | 50 | 9.381 5585 | 849 | 9.394 5235 | 901   | 0.605 4765 | 9.987 0350 | 52 | 10 |    |
| 56 | 0  | 9.381 6434 | 849 | 9.394 6136 | 901   | 0.605 3864 | 9.987 0298 | 52 | 0  | 4  |
|    | 10 | 9.381 7283 | 848 | 9.394 7037 | 900   | 0.605 2963 | 9.987 0246 | 53 | 50 |    |
|    | 20 | 9.381 8131 | 848 | 9.394 7937 | 901   | 0.605 2063 | 9.987 0193 | 52 | 40 |    |
|    | 30 | 9.381 8979 | 848 | 9.394 8838 | 900   | 0.605 1162 | 9.987 0141 | 52 | 30 |    |
|    | 40 | 9.381 9827 | 848 | 9.394 9738 | 900   | 0.605 0262 | 9.987 0089 | 52 | 20 |    |
|    | 50 | 9.382 0675 | 848 | 9.395 0638 | 900   | 0.604 9362 | 9.987 0037 | 53 | 10 |    |
| 57 | 0  | 9.382 1523 | 847 | 9.395 1538 | 900   | 0.604 8462 | 9.986 9984 | 52 | 0  | 3  |
|    | 10 | 9.382 2370 | 848 | 9.395 2438 | 900   | 0.604 7562 | 9.986 9932 | 52 | 50 |    |
|    | 20 | 9.382 3218 | 847 | 9.395 3338 | 900   | 0.604 6662 | 9.986 9880 | 53 | 40 |    |
|    | 30 | 9.382 4065 | 847 | 9.395 4238 | 899   | 0.604 5762 | 9.986 9827 | 52 | 30 |    |
|    | 40 | 9.382 4912 | 847 | 9.395 5137 | 899   | 0.604 4863 | 9.986 9775 | 52 | 20 |    |
|    | 50 | 9.382 5759 | 846 | 9.395 6036 | 899   | 0.604 3964 | 9.986 9723 | 53 | 10 |    |
| 58 | 0  | 9.382 6605 | 847 | 9.395 6935 | 899   | 0.604 3065 | 9.986 9670 | 52 | 0  | 2  |
|    | 10 | 9.382 7452 | 846 | 9.395 7834 | 899   | 0.604 2166 | 9.986 9618 | 52 | 50 |    |
|    | 20 | 9.382 8298 | 846 | 9.395 8733 | 898   | 0.604 1267 | 9.986 9566 | 53 | 40 |    |
|    | 30 | 9.382 9144 | 846 | 9.395 9631 | 899   | 0.604 0369 | 9.986 9513 | 52 | 30 |    |
|    | 40 | 9.382 9990 | 846 | 9.396 0530 | 898   | 0.603 9470 | 9.986 9461 | 53 | 20 |    |
|    | 50 | 9.383 0836 | 846 | 9.396 1428 | 898   | 0.603 8572 | 9.986 9408 | 52 | 10 |    |
| 59 | 0  | 9.383 1682 | 845 | 9.396 2326 | 898   | 0.603 7674 | 9.986 9356 | 52 | 0  | 1  |
|    | 10 | 9.383 2527 | 845 | 9.396 3224 | 897   | 0.603 6776 | 9.986 9304 | 53 | 50 |    |
|    | 20 | 9.383 3372 | 846 | 9.396 4121 | 898   | 0.603 5879 | 9.986 9251 | 52 | 40 |    |
|    | 30 | 9.383 4218 | 844 | 9.396 5019 | 897   | 0.603 4981 | 9.986 9199 | 53 | 30 |    |
|    | 40 | 9.383 5062 | 845 | 9.396 5916 | 898   | 0.603 4084 | 9.986 9146 | 52 | 20 |    |
|    | 50 | 9.383 5907 | 845 | 9.396 6814 | 897   | 0.603 3186 | 9.986 9094 | 53 | 10 |    |
| 60 | 0  | 9.383 6752 |     | 9.396 7711 |       | 0.603 2289 | 9.986 9041 |    | 0  | 0  |
| i  | "  | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d. | "  | i  |

905  
1 90.5  
2 181.0  
3 271.5  
4 362.0  
5 452.5  
6 543.0  
7 633.5  
8 724.0  
9 814.5

900  
1 90.0  
2 180.0  
3 270.0  
4 360.0  
5 450.0  
6 540.0  
7 630.0  
8 720.0  
9 810.0

895  
1 89.5  
2 179.0  
3 268.5  
4 358.0  
5 447.5  
6 537.0  
7 626.5  
8 716.0  
9 805.5

890  
1 89.0  
2 178.0  
3 267.0  
4 356.0  
5 445.0  
6 534.0  
7 623.0  
8 712.0  
9 801.0

885  
1 88.5  
2 177.0  
3 266.0  
4 355.0  
5 444.0  
6 533.0  
7 622.0  
8 711.0  
9 800.0

880  
1 88.0  
2 176.0  
3 265.0  
4 354.0  
5 443.0  
6 532.0  
7 621.0  
8 710.0  
9 799.0

875  
1 87.5  
2 175.0  
3 264.0  
4 353.0  
5 442.0  
6 531.0  
7 620.0  
8 709.0  
9 798.0



|     |    | sin        | d.   | Tang       | d. c. | Colg       | Con        | d. |    |
|-----|----|------------|------|------------|-------|------------|------------|----|----|
| 805 | 0  | 9.383 6753 | 844  | 9.396 2711 | 896   | 9.409 3230 | 9.422 9941 | 94 | 0  |
|     | 10 | 9.384 7396 | 849  | 9.396 8607 | 897   | 9.410 1491 | 9.423 8909 | 54 | 50 |
|     | 20 | 9.384 8439 | 854  | 9.397 0504 | 898   | 9.411 0199 | 9.424 8036 | 54 | 40 |
|     | 30 | 9.384 9284 | 859  | 9.397 2401 | 899   | 9.411 9351 | 9.425 7321 | 54 | 30 |
|     | 40 | 9.385 0128 | 864  | 9.397 4297 | 900   | 9.412 8957 | 9.426 6764 | 54 | 20 |
|     | 50 | 9.385 0973 | 869  | 9.397 6194 | 901   | 9.413 9017 | 9.427 6365 | 54 | 10 |
| 806 | 0  | 9.385 1818 | 874  | 9.397 8090 | 902   | 9.414 9531 | 9.428 6124 | 54 | 0  |
|     | 10 | 9.385 2660 | 879  | 9.397 9985 | 903   | 9.415 9599 | 9.429 6041 | 54 | 50 |
|     | 20 | 9.385 3502 | 884  | 9.398 1881 | 904   | 9.416 9628 | 9.430 6116 | 54 | 40 |
|     | 30 | 9.385 4345 | 889  | 9.398 3777 | 905   | 9.417 9657 | 9.431 6350 | 54 | 30 |
|     | 40 | 9.385 5188 | 894  | 9.398 5673 | 906   | 9.418 9686 | 9.432 6743 | 54 | 20 |
|     | 50 | 9.385 6031 | 899  | 9.398 7569 | 907   | 9.419 9715 | 9.433 7294 | 54 | 10 |
| 807 | 0  | 9.385 6873 | 904  | 9.398 9465 | 908   | 9.420 9744 | 9.434 7903 | 54 | 0  |
|     | 10 | 9.385 7715 | 909  | 9.399 1361 | 909   | 9.421 9773 | 9.435 8570 | 54 | 50 |
|     | 20 | 9.385 8557 | 914  | 9.399 3257 | 910   | 9.422 9802 | 9.436 9305 | 54 | 40 |
|     | 30 | 9.385 9399 | 919  | 9.399 5153 | 911   | 9.423 9831 | 9.437 9999 | 54 | 30 |
|     | 40 | 9.386 0241 | 924  | 9.399 7049 | 912   | 9.424 9860 | 9.439 0752 | 54 | 20 |
|     | 50 | 9.386 1083 | 929  | 9.399 8945 | 913   | 9.425 9889 | 9.440 1564 | 54 | 10 |
| 808 | 0  | 9.386 1925 | 934  | 9.399 1041 | 914   | 9.426 9918 | 9.441 2435 | 54 | 0  |
|     | 10 | 9.386 2767 | 939  | 9.399 2937 | 915   | 9.427 9947 | 9.442 3366 | 54 | 50 |
|     | 20 | 9.386 3609 | 944  | 9.399 4833 | 916   | 9.428 9976 | 9.443 4357 | 54 | 40 |
|     | 30 | 9.386 4451 | 949  | 9.399 6729 | 917   | 9.429 9995 | 9.444 5408 | 54 | 30 |
|     | 40 | 9.386 5293 | 954  | 9.399 8625 | 918   | 9.430 9994 | 9.445 6519 | 54 | 20 |
|     | 50 | 9.386 6135 | 959  | 9.399 1021 | 919   | 9.431 9993 | 9.446 7690 | 54 | 10 |
| 809 | 0  | 9.386 6977 | 964  | 9.399 2917 | 920   | 9.432 9992 | 9.447 8921 | 54 | 0  |
|     | 10 | 9.386 7819 | 969  | 9.399 4813 | 921   | 9.433 9991 | 9.449 0212 | 54 | 50 |
|     | 20 | 9.386 8661 | 974  | 9.399 6709 | 922   | 9.434 9990 | 9.450 1563 | 54 | 40 |
|     | 30 | 9.386 9503 | 979  | 9.399 8605 | 923   | 9.435 9989 | 9.451 2974 | 54 | 30 |
|     | 40 | 9.387 0345 | 984  | 9.399 1001 | 924   | 9.436 9988 | 9.452 4445 | 54 | 20 |
|     | 50 | 9.387 1187 | 989  | 9.399 2897 | 925   | 9.437 9987 | 9.453 5976 | 54 | 10 |
| 810 | 0  | 9.387 2029 | 994  | 9.399 4793 | 926   | 9.438 9986 | 9.454 7567 | 54 | 0  |
|     | 10 | 9.387 2871 | 999  | 9.399 6689 | 927   | 9.439 9985 | 9.455 9218 | 54 | 50 |
|     | 20 | 9.387 3713 | 1004 | 9.399 8585 | 928   | 9.440 9984 | 9.457 0929 | 54 | 40 |
|     | 30 | 9.387 4555 | 1009 | 9.399 1041 | 929   | 9.441 9983 | 9.458 2690 | 54 | 30 |
|     | 40 | 9.387 5397 | 1014 | 9.399 3497 | 930   | 9.442 9982 | 9.459 4511 | 54 | 20 |
|     | 50 | 9.387 6239 | 1019 | 9.399 5953 | 931   | 9.443 9981 | 9.460 6392 | 54 | 10 |
| 811 | 0  | 9.387 7081 | 1024 | 9.399 8409 | 932   | 9.444 9980 | 9.461 8333 | 54 | 0  |
|     | 10 | 9.387 7923 | 1029 | 9.399 1041 | 933   | 9.445 9979 | 9.463 0334 | 54 | 50 |
|     | 20 | 9.387 8765 | 1034 | 9.399 3497 | 934   | 9.446 9978 | 9.464 2395 | 54 | 40 |
|     | 30 | 9.387 9607 | 1039 | 9.399 5953 | 935   | 9.447 9977 | 9.465 4516 | 54 | 30 |
|     | 40 | 9.388 0449 | 1044 | 9.399 8409 | 936   | 9.448 9976 | 9.466 6697 | 54 | 20 |
|     | 50 | 9.388 1291 | 1049 | 9.399 1041 | 937   | 9.449 9975 | 9.467 8938 | 54 | 10 |
| 812 | 0  | 9.388 2133 | 1054 | 9.399 3497 | 938   | 9.450 9974 | 9.469 1239 | 54 | 0  |
|     | 10 | 9.388 2975 | 1059 | 9.399 5953 | 939   | 9.451 9973 | 9.470 3590 | 54 | 50 |
|     | 20 | 9.388 3817 | 1064 | 9.399 8409 | 940   | 9.452 9972 | 9.471 6001 | 54 | 40 |
|     | 30 | 9.388 4659 | 1069 | 9.399 1041 | 941   | 9.453 9971 | 9.472 8462 | 54 | 30 |
|     | 40 | 9.388 5501 | 1074 | 9.399 3497 | 942   | 9.454 9970 | 9.474 0973 | 54 | 20 |
|     | 50 | 9.388 6343 | 1079 | 9.399 5953 | 943   | 9.455 9969 | 9.475 3534 | 54 | 10 |
| 813 | 0  | 9.388 7185 | 1084 | 9.399 8409 | 944   | 9.456 9968 | 9.476 6155 | 54 | 0  |
|     | 10 | 9.388 8027 | 1089 | 9.399 1041 | 945   | 9.457 9967 | 9.477 8826 | 54 | 50 |
|     | 20 | 9.388 8869 | 1094 | 9.399 3497 | 946   | 9.458 9966 | 9.479 1547 | 54 | 40 |
|     | 30 | 9.388 9711 | 1099 | 9.399 5953 | 947   | 9.459 9965 | 9.480 4318 | 54 | 30 |
|     | 40 | 9.389 0553 | 1104 | 9.399 8409 | 948   | 9.460 9964 | 9.481 7139 | 54 | 20 |
|     | 50 | 9.389 1395 | 1109 | 9.399 1041 | 949   | 9.461 9963 | 9.482 9990 | 54 | 10 |
| 814 | 0  | 9.389 2237 | 1114 | 9.399 3497 | 950   | 9.462 9962 | 9.484 2891 | 54 | 0  |
|     | 10 | 9.389 3079 | 1119 | 9.399 5953 | 951   | 9.463 9961 | 9.485 5842 | 54 | 50 |
|     | 20 | 9.389 3921 | 1124 | 9.399 8409 | 952   | 9.464 9960 | 9.486 8853 | 54 | 40 |
|     | 30 | 9.389 4763 | 1129 | 9.399 1041 | 953   | 9.465 9959 | 9.488 1914 | 54 | 30 |
|     | 40 | 9.389 5605 | 1134 | 9.399 3497 | 954   | 9.466 9958 | 9.489 5025 | 54 | 20 |
|     | 50 | 9.389 6447 | 1139 | 9.399 5953 | 955   | 9.467 9957 | 9.490 8186 | 54 | 10 |
| 815 | 0  | 9.389 7289 | 1144 | 9.399 8409 | 956   | 9.468 9956 | 9.492 1397 | 54 | 0  |
|     | 10 | 9.389 8131 | 1149 | 9.399 1041 | 957   | 9.469 9955 | 9.493 4658 | 54 | 50 |
|     | 20 | 9.389 8973 | 1154 | 9.399 3497 | 958   | 9.470 9954 | 9.494 7969 | 54 | 40 |
|     | 30 | 9.389 9815 | 1159 | 9.399 5953 | 959   | 9.471 9953 | 9.496 1330 | 54 | 30 |
|     | 40 | 9.390 0657 | 1164 | 9.399 8409 | 960   | 9.472 9952 | 9.497 4741 | 54 | 20 |
|     | 50 | 9.390 1499 | 1169 | 9.399 1041 | 961   | 9.473 9951 | 9.498 8202 | 54 | 10 |
| 816 | 0  | 9.390 2341 | 1174 | 9.399 3497 | 962   | 9.474 9950 | 9.499 1713 | 54 | 0  |
|     | 10 | 9.390 3183 | 1179 | 9.399 5953 | 963   | 9.475 9949 | 9.500 5274 | 54 | 50 |
|     | 20 | 9.390 4025 | 1184 | 9.399 8409 | 964   | 9.476 9948 | 9.501 8885 | 54 | 40 |
|     | 30 | 9.390 4867 | 1189 | 9.399 1041 | 965   | 9.477 9947 | 9.503 2546 | 54 | 30 |
|     | 40 | 9.390 5709 | 1194 | 9.399 3497 | 966   | 9.478 9946 | 9.504 6257 | 54 | 20 |
|     | 50 | 9.390 6551 | 1199 | 9.399 5953 | 967   | 9.479 9945 | 9.505 9998 | 54 | 10 |
| 817 | 0  | 9.390 7393 | 1204 | 9.399 8409 | 968   | 9.480 9944 | 9.507 3799 | 54 | 0  |
|     | 10 | 9.390 8235 | 1209 | 9.399 1041 | 969   | 9.481 9943 | 9.508 7640 | 54 | 50 |
|     | 20 | 9.390 9077 | 1214 | 9.399 3497 | 970   | 9.482 9942 | 9.510 1531 | 54 | 40 |
|     | 30 | 9.391 0019 | 1219 | 9.399 5953 | 971   | 9.483 9941 | 9.511 5472 | 54 | 30 |
|     | 40 | 9.391 0961 | 1224 | 9.399 8409 | 972   | 9.484 9940 | 9.512 9463 | 54 | 20 |
|     | 50 | 9.391 1803 | 1229 | 9.399 1041 | 973   | 9.485 9939 | 9.514 3504 | 54 | 10 |
| 818 | 0  | 9.391 2645 | 1234 | 9.399 3497 | 974   | 9.486 9938 | 9.515 7595 | 54 | 0  |
|     | 10 | 9.391 3487 | 1239 | 9.399 5953 | 975   | 9.487 9937 | 9.517 1736 | 54 | 50 |
|     | 20 | 9.391 4329 | 1244 | 9.399 8409 | 976   | 9.488 9936 | 9.518 5927 | 54 | 40 |
|     | 30 | 9.391 5171 | 1249 | 9.399 1041 | 977   | 9.489 9935 | 9.520 0168 | 54 | 30 |
|     | 40 | 9.391 6013 | 1254 | 9.399 3497 | 978   | 9.490 9934 | 9.521 4459 | 54 | 20 |
|     | 50 | 9.391 6855 | 1259 | 9.399 5953 | 979   | 9.491 9933 | 9.522 8790 | 54 | 10 |
| 819 | 0  | 9.391 7697 | 1264 | 9.399 8409 | 980   | 9.492 9932 | 9.524 3171 | 54 | 0  |
|     | 10 | 9.391 8539 | 1269 | 9.399 1041 | 981   | 9.493 9931 | 9.525 7602 | 54 | 50 |
|     | 20 | 9.391 9381 | 1274 | 9.399 3497 | 982   | 9.494 9930 | 9.527 2083 | 54 | 40 |
|     | 30 | 9.392 0223 | 1279 | 9.399 5953 | 983   | 9.495 9929 | 9.528 6614 | 54 | 30 |
|     | 40 | 9.392 1065 | 1284 | 9.399 8409 | 984   | 9.496 9928 | 9.530 1195 | 54 | 20 |
|     | 50 | 9.392 1907 | 1289 | 9.399 1041 | 985   | 9.497 9927 | 9.531 5826 | 54 | 10 |
| 820 | 0  | 9.392 2749 | 1294 | 9.399 3497 | 986   | 9.498 9926 | 9.533 0507 | 54 | 0  |
|     | 10 | 9.392 3591 | 1299 | 9.399 5953 | 987   | 9.499 9925 | 9.534 5238 | 54 | 50 |
|     | 20 | 9.392 4433 | 1304 | 9.399 8409 | 988   | 9.500 9924 | 9.535 9999 | 54 | 40 |
|     | 30 | 9.392 5275 | 1309 | 9.399 1041 | 989   | 9.501 9923 | 9.537 4790 | 54 | 30 |
|     | 40 | 9.392 6117 | 1314 | 9.399 3497 | 990   | 9.502 9922 | 9.538 9621 | 54 | 20 |
|     | 50 | 9.392 6959 | 1319 | 9.399 5953 | 991   | 9.503 9921 | 9.540 4492 | 54 | 10 |



|    | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d. | "  |          |
|----|----|------------|-----|------------|-------|------------|------------|----|----|----------|
| 10 | o  | 9.388 7109 | 834 | 9.402 1237 | 887   | 0.597 8763 | 9.986 5872 | 53 | o  | 50       |
|    | 10 | 9.388 7943 | 834 | 9.402 2124 | 887   | 0.597 7876 | 9.986 5819 | 53 | 50 | 886      |
|    | 20 | 9.388 8777 | 834 | 9.402 3011 | 887   | 0.597 6989 | 9.986 5766 | 54 | 40 | 1) 88.5  |
|    | 30 | 9.388 9611 | 833 | 9.402 3898 | 887   | 0.597 6102 | 9.986 5712 | 54 | 30 | 2) 177.0 |
|    | 40 | 9.389 0444 | 833 | 9.402 4785 | 886   | 0.597 5215 | 9.986 5659 | 53 | 20 | 3) 265.5 |
|    | 50 | 9.389 1277 | 834 | 9.402 5671 | 887   | 0.597 4329 | 9.986 5606 | 53 | 10 | 4) 354.0 |
| 11 | o  | 9.389 2111 | 833 | 9.402 6558 | 886   | 0.597 3442 | 9.986 5553 | 53 | o  | 49       |
|    | 10 | 9.389 2944 | 833 | 9.402 7444 | 886   | 0.597 2556 | 9.986 5500 | 54 | 50 | 5) 442.5 |
|    | 20 | 9.389 3777 | 832 | 9.402 8330 | 886   | 0.597 1670 | 9.986 5446 | 54 | 40 | 6) 531.0 |
|    | 30 | 9.389 4609 | 833 | 9.402 9216 | 886   | 0.597 0784 | 9.986 5393 | 53 | 30 | 7) 619.5 |
|    | 40 | 9.389 5442 | 832 | 9.403 0102 | 885   | 0.596 9898 | 9.986 5340 | 53 | 20 | 8) 708.0 |
|    | 50 | 9.389 6274 | 832 | 9.403 0987 | 886   | 0.596 9013 | 9.986 5287 | 54 | 10 | 9) 796.5 |
| 12 | o  | 9.389 7106 | 832 | 9.403 1873 | 885   | 0.596 8127 | 9.986 5233 | 53 | o  | 48       |
|    | 10 | 9.389 7938 | 832 | 9.403 2758 | 885   | 0.596 7242 | 9.986 5180 | 53 | 50 | 880      |
|    | 20 | 9.389 8770 | 832 | 9.403 3643 | 885   | 0.596 6357 | 9.986 5127 | 54 | 40 | 1) 88.0  |
|    | 30 | 9.389 9602 | 831 | 9.403 4528 | 885   | 0.596 5472 | 9.986 5073 | 54 | 30 | 2) 176.0 |
|    | 40 | 9.390 0433 | 832 | 9.403 5413 | 885   | 0.596 4587 | 9.986 5020 | 53 | 20 | 3) 264.0 |
|    | 50 | 9.390 1265 | 831 | 9.403 6298 | 884   | 0.596 3702 | 9.986 4967 | 54 | 10 | 4) 353.0 |
| 13 | o  | 9.390 2096 | 831 | 9.403 7182 | 885   | 0.596 2818 | 9.986 4913 | 53 | o  | 47       |
|    | 10 | 9.390 2927 | 831 | 9.403 8067 | 884   | 0.596 1933 | 9.986 4860 | 53 | 50 | 5) 441.5 |
|    | 20 | 9.390 3758 | 830 | 9.403 8951 | 884   | 0.596 1049 | 9.986 4807 | 54 | 40 | 6) 530.0 |
|    | 30 | 9.390 4588 | 831 | 9.403 9835 | 884   | 0.596 0165 | 9.986 4753 | 54 | 30 | 7) 618.5 |
|    | 40 | 9.390 5419 | 830 | 9.404 0719 | 883   | 0.595 9281 | 9.986 4700 | 53 | 20 | 8) 707.0 |
|    | 50 | 9.390 6249 | 830 | 9.404 1602 | 884   | 0.595 8398 | 9.986 4647 | 54 | 10 | 9) 795.0 |
| 14 | o  | 9.390 7079 | 830 | 9.404 2486 | 883   | 0.595 7514 | 9.986 4593 | 53 | o  | 46       |
|    | 10 | 9.390 7909 | 830 | 9.404 3369 | 884   | 0.595 6631 | 9.986 4540 | 54 | 50 | 830      |
|    | 20 | 9.390 8739 | 830 | 9.404 4253 | 883   | 0.595 5747 | 9.986 4486 | 54 | 40 | 1) 83.0  |
|    | 30 | 9.390 9569 | 829 | 9.404 5136 | 883   | 0.595 4864 | 9.986 4433 | 53 | 30 | 2) 166.0 |
|    | 40 | 9.391 0398 | 829 | 9.404 6019 | 882   | 0.595 3981 | 9.986 4379 | 54 | 20 | 3) 249.0 |
|    | 50 | 9.391 1227 | 830 | 9.404 6901 | 883   | 0.595 3099 | 9.986 4326 | 53 | 10 | 4) 334.0 |
| 15 | o  | 9.391 2057 | 828 | 9.404 7784 | 882   | 0.595 2216 | 9.986 4273 | 54 | o  | 45       |
|    | 10 | 9.391 2885 | 829 | 9.404 8666 | 883   | 0.595 1334 | 9.986 4219 | 53 | 50 | 5) 412.5 |
|    | 20 | 9.391 3714 | 829 | 9.404 9549 | 882   | 0.595 0451 | 9.986 4166 | 54 | 40 | 6) 495.0 |
|    | 30 | 9.391 4543 | 828 | 9.405 0431 | 882   | 0.594 9569 | 9.986 4112 | 54 | 30 | 7) 577.5 |
|    | 40 | 9.391 5371 | 829 | 9.405 1313 | 882   | 0.594 8687 | 9.986 4059 | 53 | 20 | 8) 660.0 |
|    | 50 | 9.391 6200 | 828 | 9.405 2195 | 881   | 0.594 7805 | 9.986 4005 | 54 | 10 | 9) 742.5 |
| 16 | o  | 9.391 7028 | 828 | 9.405 3076 | 882   | 0.594 6924 | 9.986 3952 | 54 | o  | 44       |
|    | 10 | 9.391 7856 | 828 | 9.405 3958 | 881   | 0.594 6042 | 9.986 3898 | 54 | 50 |          |
|    | 20 | 9.391 8684 | 827 | 9.405 4839 | 881   | 0.594 5161 | 9.986 3844 | 54 | 40 |          |
|    | 30 | 9.391 9511 | 828 | 9.405 5720 | 881   | 0.594 4280 | 9.986 3791 | 53 | 30 |          |
|    | 40 | 9.392 0339 | 827 | 9.405 6601 | 881   | 0.594 3399 | 9.986 3737 | 54 | 20 |          |
|    | 50 | 9.392 1166 | 827 | 9.405 7482 | 881   | 0.594 2518 | 9.986 3684 | 54 | 10 |          |
| 17 | o  | 9.392 1993 | 827 | 9.405 8363 | 880   | 0.594 1637 | 9.986 3630 | 54 | o  | 43       |
|    | 10 | 9.392 2820 | 827 | 9.405 9243 | 881   | 0.594 0757 | 9.986 3576 | 54 | 50 | 53       |
|    | 20 | 9.392 3647 | 826 | 9.406 0124 | 880   | 0.593 9876 | 9.986 3523 | 53 | 40 | 1) 5.3   |
|    | 30 | 9.392 4473 | 827 | 9.406 1004 | 880   | 0.593 8996 | 9.986 3469 | 54 | 30 | 2) 10.6  |
|    | 40 | 9.392 5300 | 826 | 9.406 1884 | 880   | 0.593 8116 | 9.986 3416 | 53 | 20 | 3) 15.9  |
|    | 50 | 9.392 6126 | 826 | 9.406 2764 | 880   | 0.593 7236 | 9.986 3362 | 54 | 10 | 4) 21.2  |
| 18 | o  | 9.392 6952 | 826 | 9.406 3644 | 880   | 0.593 6356 | 9.986 3308 | 54 | o  | 42       |
|    | 10 | 9.392 7778 | 826 | 9.406 4524 | 879   | 0.593 5476 | 9.986 3255 | 54 | 50 | 5) 26.5  |
|    | 20 | 9.392 8604 | 826 | 9.406 5403 | 879   | 0.593 4597 | 9.986 3201 | 54 | 40 | 6) 31.8  |
|    | 30 | 9.392 9430 | 825 | 9.406 6282 | 879   | 0.593 3718 | 9.986 3147 | 53 | 30 | 7) 37.1  |
|    | 40 | 9.393 0255 | 825 | 9.406 7161 | 879   | 0.593 2839 | 9.986 3094 | 54 | 20 | 8) 42.4  |
|    | 50 | 9.393 1080 | 825 | 9.406 8040 | 879   | 0.593 1960 | 9.986 3040 | 54 | 10 | 9) 47.7  |
| 19 | o  | 9.393 1905 | 825 | 9.406 8919 | 879   | 0.593 1081 | 9.986 2986 | 54 | o  | 41       |
|    | 10 | 9.393 2730 | 825 | 9.406 9798 | 878   | 0.593 0202 | 9.986 2932 | 54 | 50 | 54       |
|    | 20 | 9.393 3555 | 825 | 9.407 0676 | 878   | 0.592 9324 | 9.986 2879 | 53 | 40 | 1) 5.4   |
|    | 30 | 9.393 4380 | 824 | 9.407 1555 | 878   | 0.592 8445 | 9.986 2825 | 54 | 30 | 2) 10.8  |
|    | 40 | 9.393 5204 | 824 | 9.407 2433 | 878   | 0.592 7567 | 9.986 2771 | 54 | 20 | 3) 16.2  |
|    | 50 | 9.393 6028 | 824 | 9.407 3311 | 878   | 0.592 6689 | 9.986 2717 | 54 | 10 | 4) 21.6  |
| 20 | o  | 9.393 6852 |     | 9.407 4189 |       | 0.592 5811 | 9.986 2663 |    | o  | 40       |
|    |    |            |     |            |       |            |            |    |    | 5) 27.0  |
|    |    |            |     |            |       |            |            |    |    | 6) 32.4  |
|    |    |            |     |            |       |            |            |    |    | 7) 37.8  |
|    |    |            |     |            |       |            |            |    |    | 8) 43.2  |
|    |    |            |     |            |       |            |            |    |    | 9) 48.6  |
|    | "  | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d. | "  |          |



|    | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d. | "  |    |
|----|----|------------|-----|------------|-------|------------|------------|----|----|----|
| 20 | 0  | 9.393 6852 | 824 | 9.407 4189 | 878   | 0.592 5811 | 9.986 2663 | 53 | 0  | 40 |
|    | 10 | 9.393 7676 | 824 | 9.407 5067 | 877   | 0.592 4933 | 9.986 2610 | 54 | 50 |    |
|    | 20 | 9.393 8500 | 824 | 9.407 5944 | 878   | 0.592 4056 | 9.986 2556 | 54 | 40 |    |
|    | 30 | 9.393 9324 | 824 | 9.407 6822 | 877   | 0.592 3178 | 9.986 2502 | 54 | 30 |    |
|    | 40 | 9.394 0147 | 823 | 9.407 7699 | 877   | 0.592 2301 | 9.986 2448 | 54 | 20 |    |
|    | 50 | 9.394 0971 | 823 | 9.407 8576 | 877   | 0.592 1424 | 9.986 2394 | 54 | 10 |    |
| 21 | 0  | 9.394 1794 | 823 | 9.407 9453 | 877   | 0.592 0547 | 9.986 2340 | 54 | 0  | 39 |
|    | 10 | 9.394 2617 | 822 | 9.408 0330 | 877   | 0.591 9670 | 9.986 2287 | 53 | 50 |    |
|    | 20 | 9.394 3439 | 823 | 9.408 1207 | 876   | 0.591 8793 | 9.986 2233 | 54 | 40 |    |
|    | 30 | 9.394 4262 | 823 | 9.408 2083 | 876   | 0.591 7917 | 9.986 2179 | 54 | 30 |    |
|    | 40 | 9.394 5084 | 822 | 9.408 2959 | 877   | 0.591 7041 | 9.986 2125 | 54 | 20 |    |
|    | 50 | 9.394 5907 | 822 | 9.408 3836 | 876   | 0.591 6164 | 9.986 2071 | 54 | 10 |    |
| 22 | 0  | 9.394 6729 | 822 | 9.408 4712 | 876   | 0.591 5288 | 9.986 2017 | 54 | 0  | 38 |
|    | 10 | 9.394 7551 | 822 | 9.408 5588 | 875   | 0.591 4412 | 9.986 1963 | 54 | 50 |    |
|    | 20 | 9.394 8373 | 821 | 9.408 6463 | 876   | 0.591 3537 | 9.986 1909 | 54 | 40 |    |
|    | 30 | 9.394 9194 | 822 | 9.408 7339 | 875   | 0.591 2661 | 9.986 1855 | 54 | 30 |    |
|    | 40 | 9.395 0016 | 821 | 9.408 8214 | 876   | 0.591 1786 | 9.986 1801 | 54 | 20 |    |
|    | 50 | 9.395 0837 | 821 | 9.408 9090 | 875   | 0.591 0910 | 9.986 1747 | 54 | 10 |    |
| 23 | 0  | 9.395 1658 | 821 | 9.408 9965 | 875   | 0.591 0035 | 9.986 1693 | 54 | 0  | 37 |
|    | 10 | 9.395 2479 | 820 | 9.409 0840 | 874   | 0.590 9160 | 9.986 1639 | 54 | 50 |    |
|    | 20 | 9.395 3300 | 820 | 9.409 1714 | 875   | 0.590 8286 | 9.986 1585 | 54 | 40 |    |
|    | 30 | 9.395 4120 | 821 | 9.409 2589 | 875   | 0.590 7411 | 9.986 1531 | 54 | 30 |    |
|    | 40 | 9.395 4941 | 821 | 9.409 3464 | 874   | 0.590 6536 | 9.986 1477 | 54 | 20 |    |
|    | 50 | 9.395 5761 | 820 | 9.409 4338 | 874   | 0.590 5662 | 9.986 1423 | 54 | 10 |    |
| 24 | 0  | 9.395 6581 | 820 | 9.409 5212 | 874   | 0.590 4788 | 9.986 1369 | 54 | 0  | 36 |
|    | 10 | 9.395 7401 | 820 | 9.409 6086 | 874   | 0.590 3914 | 9.986 1315 | 54 | 50 |    |
|    | 20 | 9.395 8221 | 820 | 9.409 6960 | 874   | 0.590 3040 | 9.986 1261 | 54 | 40 |    |
|    | 30 | 9.395 9041 | 819 | 9.409 7834 | 873   | 0.590 2166 | 9.986 1207 | 54 | 30 |    |
|    | 40 | 9.395 9860 | 819 | 9.409 8707 | 874   | 0.590 1293 | 9.986 1153 | 54 | 20 |    |
|    | 50 | 9.396 0679 | 820 | 9.409 9581 | 873   | 0.590 0419 | 9.986 1099 | 54 | 10 |    |
| 25 | 0  | 9.396 1499 | 819 | 9.410 0454 | 873   | 0.589 9546 | 9.986 1045 | 55 | 0  | 35 |
|    | 10 | 9.396 2318 | 818 | 9.410 1327 | 873   | 0.589 8673 | 9.986 0990 | 54 | 50 |    |
|    | 20 | 9.396 3136 | 819 | 9.410 2200 | 873   | 0.589 7800 | 9.986 0936 | 54 | 40 |    |
|    | 30 | 9.396 3955 | 818 | 9.410 3073 | 872   | 0.589 6927 | 9.986 0882 | 54 | 30 |    |
|    | 40 | 9.396 4773 | 818 | 9.410 3945 | 873   | 0.589 6055 | 9.986 0828 | 54 | 20 |    |
|    | 50 | 9.396 5592 | 819 | 9.410 4818 | 872   | 0.589 5182 | 9.986 0774 | 54 | 10 |    |
| 26 | 0  | 9.396 6410 | 818 | 9.410 5690 | 872   | 0.589 4310 | 9.986 0720 | 55 | 0  | 34 |
|    | 10 | 9.396 7228 | 818 | 9.410 6562 | 873   | 0.589 3438 | 9.986 0665 | 54 | 50 |    |
|    | 20 | 9.396 8046 | 817 | 9.410 7435 | 871   | 0.589 2565 | 9.986 0611 | 54 | 40 |    |
|    | 30 | 9.396 8863 | 818 | 9.410 8306 | 872   | 0.589 1694 | 9.986 0557 | 54 | 30 |    |
|    | 40 | 9.396 9681 | 817 | 9.410 9178 | 872   | 0.589 0822 | 9.986 0503 | 54 | 20 |    |
|    | 50 | 9.397 0498 | 817 | 9.411 0050 | 871   | 0.588 9950 | 9.986 0449 | 54 | 10 |    |
| 27 | 0  | 9.397 1315 | 817 | 9.411 0921 | 871   | 0.588 9079 | 9.986 0394 | 55 | 0  | 33 |
|    | 10 | 9.397 2132 | 817 | 9.411 1792 | 871   | 0.588 8208 | 9.986 0340 | 54 | 50 |    |
|    | 20 | 9.397 2949 | 817 | 9.411 2663 | 871   | 0.588 7337 | 9.986 0286 | 54 | 40 |    |
|    | 30 | 9.397 3766 | 816 | 9.411 3534 | 871   | 0.588 6466 | 9.986 0231 | 55 | 30 |    |
|    | 40 | 9.397 4582 | 817 | 9.411 4405 | 871   | 0.588 5595 | 9.986 0177 | 54 | 20 |    |
|    | 50 | 9.397 5399 | 816 | 9.411 5276 | 870   | 0.588 4724 | 9.986 0123 | 54 | 10 |    |
| 28 | 0  | 9.397 6215 | 816 | 9.411 6146 | 870   | 0.588 3854 | 9.986 0069 | 55 | 0  | 32 |
|    | 10 | 9.397 7031 | 816 | 9.411 7017 | 870   | 0.588 2983 | 9.986 0014 | 54 | 50 |    |
|    | 20 | 9.397 7847 | 816 | 9.411 7887 | 870   | 0.588 2113 | 9.985 9960 | 54 | 40 |    |
|    | 30 | 9.397 8663 | 815 | 9.411 8757 | 870   | 0.588 1243 | 9.985 9906 | 54 | 30 |    |
|    | 40 | 9.397 9478 | 815 | 9.411 9627 | 870   | 0.588 0373 | 9.985 9851 | 55 | 20 |    |
|    | 50 | 9.398 0293 | 816 | 9.412 0497 | 869   | 0.587 9503 | 9.985 9797 | 54 | 10 |    |
| 29 | 0  | 9.398 1109 | 815 | 9.412 1366 | 870   | 0.587 8634 | 9.985 9742 | 55 | 0  | 31 |
|    | 10 | 9.398 1924 | 815 | 9.412 2236 | 869   | 0.587 7764 | 9.985 9688 | 54 | 50 |    |
|    | 20 | 9.398 2739 | 814 | 9.412 3105 | 869   | 0.587 6895 | 9.985 9634 | 54 | 40 |    |
|    | 30 | 9.398 3553 | 815 | 9.412 3974 | 869   | 0.587 6026 | 9.985 9579 | 55 | 30 |    |
|    | 40 | 9.398 4368 | 814 | 9.412 4843 | 869   | 0.587 5157 | 9.985 9525 | 54 | 20 |    |
|    | 50 | 9.398 5182 | 814 | 9.412 5712 | 869   | 0.587 4288 | 9.985 9470 | 55 | 10 |    |
| 30 | 0  | 9.398 5996 | 814 | 9.412 6581 | 869   | 0.587 3419 | 9.985 9416 | 54 | 0  | 30 |
|    |    |            |     |            |       |            |            |    |    |    |
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|    | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d. | "  |    |
|----|----|------------|-----|------------|-------|------------|------------|----|----|----|
| 30 | o  | 9.398 5996 | 814 | 9.412 6581 | 868   | 0.587 3419 | 9.985 9416 | 55 | o  | 30 |
|    | 10 | 9.398 6810 | 814 | 9.412 7449 | 868   | 0.587 2551 | 9.985 9361 | 54 | 50 |    |
|    | 20 | 9.398 7624 | 814 | 9.412 8317 | 869   | 0.587 1683 | 9.985 9307 | 54 | 40 |    |
|    | 30 | 9.398 8438 | 814 | 9.412 9186 | 868   | 0.587 0814 | 9.985 9253 | 54 | 30 |    |
|    | 40 | 9.398 9252 | 813 | 9.413 0054 | 868   | 0.586 9946 | 9.985 9198 | 55 | 20 |    |
|    | 50 | 9.399 0065 | 813 | 9.413 0922 | 867   | 0.586 9078 | 9.985 9144 | 54 | 10 |    |
| 31 | o  | 9.399 0878 | 813 | 9.413 1789 | 868   | 0.586 8211 | 9.985 9089 | 55 | o  | 29 |
|    | 10 | 9.399 1691 | 813 | 9.413 2657 | 867   | 0.586 7343 | 9.985 9034 | 54 | 50 |    |
|    | 20 | 9.399 2504 | 813 | 9.413 3524 | 868   | 0.586 6476 | 9.985 8980 | 54 | 40 |    |
|    | 30 | 9.399 3317 | 813 | 9.413 4392 | 867   | 0.586 5608 | 9.985 8925 | 55 | 30 |    |
|    | 40 | 9.399 4130 | 812 | 9.413 5259 | 867   | 0.586 4741 | 9.985 8871 | 54 | 20 |    |
|    | 50 | 9.399 4942 | 812 | 9.413 6126 | 867   | 0.586 3874 | 9.985 8816 | 55 | 10 |    |
| 32 | o  | 9.399 5754 | 813 | 9.413 6993 | 866   | 0.586 3007 | 9.985 8762 | 54 | o  | 28 |
|    | 10 | 9.399 6567 | 812 | 9.413 7859 | 867   | 0.586 2141 | 9.985 8707 | 54 | 50 |    |
|    | 20 | 9.399 7379 | 811 | 9.413 8726 | 866   | 0.586 1274 | 9.985 8653 | 55 | 40 |    |
|    | 30 | 9.399 8190 | 812 | 9.413 9592 | 867   | 0.586 0408 | 9.985 8598 | 55 | 30 |    |
|    | 40 | 9.399 9002 | 811 | 9.414 0459 | 866   | 0.585 9541 | 9.985 8543 | 54 | 20 |    |
|    | 50 | 9.399 9813 | 812 | 9.414 1325 | 866   | 0.585 8675 | 9.985 8489 | 55 | 10 |    |
| 33 | o  | 9.400 0625 | 811 | 9.414 2191 | 865   | 0.585 7809 | 9.985 8434 | 55 | o  | 27 |
|    | 10 | 9.400 1436 | 811 | 9.414 3056 | 866   | 0.585 6944 | 9.985 8379 | 54 | 50 |    |
|    | 20 | 9.400 2247 | 811 | 9.414 3922 | 866   | 0.585 6078 | 9.985 8325 | 55 | 40 |    |
|    | 30 | 9.400 3058 | 810 | 9.414 4788 | 865   | 0.585 5212 | 9.985 8270 | 55 | 30 |    |
|    | 40 | 9.400 3868 | 811 | 9.414 5653 | 865   | 0.585 4347 | 9.985 8215 | 54 | 20 |    |
|    | 50 | 9.400 4679 | 810 | 9.414 6518 | 865   | 0.585 3482 | 9.985 8161 | 55 | 10 |    |
| 34 | o  | 9.400 5489 | 810 | 9.414 7383 | 865   | 0.585 2617 | 9.985 8106 | 55 | o  | 26 |
|    | 10 | 9.400 6299 | 810 | 9.414 8248 | 865   | 0.585 1752 | 9.985 8051 | 55 | 50 |    |
|    | 20 | 9.400 7109 | 810 | 9.414 9113 | 864   | 0.585 0887 | 9.985 7996 | 55 | 40 |    |
|    | 30 | 9.400 7919 | 810 | 9.414 9977 | 865   | 0.585 0023 | 9.985 7942 | 54 | 30 |    |
|    | 40 | 9.400 8729 | 809 | 9.415 0842 | 864   | 0.584 9158 | 9.985 7887 | 55 | 20 |    |
|    | 50 | 9.400 9538 | 810 | 9.415 1706 | 864   | 0.584 8294 | 9.985 7832 | 55 | 10 |    |
| 35 | o  | 9.401 0348 | 809 | 9.415 2570 | 864   | 0.584 7430 | 9.985 7777 | 54 | o  | 25 |
|    | 10 | 9.401 1157 | 809 | 9.415 3434 | 864   | 0.584 6566 | 9.985 7723 | 55 | 50 |    |
|    | 20 | 9.401 1966 | 809 | 9.415 4298 | 864   | 0.584 5702 | 9.985 7668 | 55 | 40 |    |
|    | 30 | 9.401 2775 | 809 | 9.415 5162 | 863   | 0.584 4838 | 9.985 7613 | 55 | 30 |    |
|    | 40 | 9.401 3584 | 808 | 9.415 6025 | 864   | 0.584 3975 | 9.985 7558 | 55 | 20 |    |
|    | 50 | 9.401 4392 | 809 | 9.415 6889 | 863   | 0.584 3111 | 9.985 7503 | 54 | 10 |    |
| 36 | o  | 9.401 5201 | 808 | 9.415 7752 | 863   | 0.584 2248 | 9.985 7449 | 55 | o  | 24 |
|    | 10 | 9.401 6009 | 808 | 9.415 8615 | 863   | 0.584 1385 | 9.985 7394 | 55 | 50 |    |
|    | 20 | 9.401 6817 | 808 | 9.415 9478 | 863   | 0.584 0522 | 9.985 7339 | 55 | 40 |    |
|    | 30 | 9.401 7625 | 808 | 9.416 0341 | 862   | 0.583 9659 | 9.985 7284 | 55 | 30 |    |
|    | 40 | 9.401 8433 | 807 | 9.416 1203 | 863   | 0.583 8797 | 9.985 7229 | 55 | 20 |    |
|    | 50 | 9.401 9240 | 808 | 9.416 2066 | 862   | 0.583 7934 | 9.985 7174 | 55 | 10 |    |
| 37 | o  | 9.402 0048 | 807 | 9.416 2928 | 862   | 0.583 7072 | 9.985 7119 | 55 | o  | 23 |
|    | 10 | 9.402 0855 | 807 | 9.416 3790 | 863   | 0.583 6210 | 9.985 7064 | 55 | 50 |    |
|    | 20 | 9.402 1662 | 807 | 9.416 4653 | 861   | 0.583 5347 | 9.985 7009 | 55 | 40 |    |
|    | 30 | 9.402 2469 | 807 | 9.416 5514 | 862   | 0.583 4486 | 9.985 6955 | 54 | 30 |    |
|    | 40 | 9.402 3276 | 806 | 9.416 6376 | 862   | 0.583 3624 | 9.985 6900 | 55 | 20 |    |
|    | 50 | 9.402 4082 | 807 | 9.416 7238 | 861   | 0.583 2762 | 9.985 6845 | 55 | 10 |    |
| 38 | o  | 9.402 4889 | 806 | 9.416 8099 | 862   | 0.583 1901 | 9.985 6790 | 55 | o  | 22 |
|    | 10 | 9.402 5695 | 806 | 9.416 8961 | 861   | 0.583 1039 | 9.985 6735 | 55 | 50 |    |
|    | 20 | 9.402 6501 | 806 | 9.416 9822 | 861   | 0.583 0178 | 9.985 6680 | 55 | 40 |    |
|    | 30 | 9.402 7307 | 806 | 9.417 0683 | 861   | 0.582 9317 | 9.985 6625 | 55 | 30 |    |
|    | 40 | 9.402 8113 | 806 | 9.417 1544 | 860   | 0.582 8456 | 9.985 6570 | 55 | 20 |    |
|    | 50 | 9.402 8919 | 805 | 9.417 2404 | 861   | 0.582 7596 | 9.985 6515 | 55 | 10 |    |
| 39 | o  | 9.402 9724 | 806 | 9.417 3265 | 860   | 0.582 6735 | 9.985 6460 | 55 | o  | 21 |
|    | 10 | 9.403 0530 | 805 | 9.417 4125 | 860   | 0.582 5875 | 9.985 6405 | 56 | 50 |    |
|    | 20 | 9.403 1335 | 805 | 9.417 4985 | 861   | 0.582 5015 | 9.985 6349 | 55 | 40 |    |
|    | 30 | 9.403 2140 | 805 | 9.417 5846 | 860   | 0.582 4154 | 9.985 6294 | 55 | 30 |    |
|    | 40 | 9.403 2945 | 805 | 9.417 6706 | 859   | 0.582 3294 | 9.985 6239 | 55 | 20 |    |
|    | 50 | 9.403 3750 | 804 | 9.417 7565 | 860   | 0.582 2435 | 9.985 6184 | 55 | 10 |    |
| 40 | o  | 9.403 4554 |     | 9.417 8425 |       | 0.582 1575 | 9.985 6129 |    | o  | 20 |

865  
1 86.5  
2 173.0  
3 259.5  
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5 432.5  
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3 258.0  
4 344.0  
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7 602.0  
8 688.0  
9 774.0

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1 81.5  
2 163.0  
3 244.5  
4 326.0  
5 407.5  
6 489.0  
7 570.5  
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9 733.5

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3 243.0  
4 324.0  
5 405.0  
6 486.0  
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9 729.0

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1 80.5  
2 161.0  
3 242.5  
4 323.0  
5 404.5  
6 485.0  
7 566.0  
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1 5.5  
2 11.0  
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8 44.0  
9 49.5







|    | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d. | "  |    |
|----|----|------------|-----|------------|-------|------------|------------|----|----|----|
| 50 | 0  | 9.408 2539 | 795 | 9.422 9735 | 851   | 0.577 0265 | 9.985 2803 | 56 | 0  | 10 |
|    | 10 | 9.408 3334 | 794 | 9.423 0586 | 851   | 0.576 9414 | 9.985 2747 | 55 | 50 |    |
|    | 20 | 9.408 4128 | 794 | 9.423 1437 | 850   | 0.576 8563 | 9.985 2692 | 55 | 40 |    |
|    | 30 | 9.408 4923 | 795 | 9.423 2287 | 850   | 0.576 7713 | 9.985 2636 | 56 | 30 |    |
|    | 40 | 9.408 5717 | 794 | 9.423 3137 | 851   | 0.576 6863 | 9.985 2580 | 56 | 20 |    |
|    | 50 | 9.408 6512 | 795 | 9.423 3988 | 850   | 0.576 6012 | 9.985 2524 | 56 | 10 |    |
| 51 | 0  | 9.408 7306 | 794 | 9.423 4838 | 849   | 0.576 5162 | 9.985 2468 | 55 | 0  | 9  |
|    | 10 | 9.408 8100 | 794 | 9.423 5687 | 850   | 0.576 4313 | 9.985 2413 | 56 | 50 |    |
|    | 20 | 9.408 8894 | 794 | 9.423 6537 | 850   | 0.576 3463 | 9.985 2357 | 56 | 40 |    |
|    | 30 | 9.408 9688 | 793 | 9.423 7387 | 849   | 0.576 2613 | 9.985 2301 | 56 | 30 |    |
|    | 40 | 9.409 0481 | 794 | 9.423 8236 | 849   | 0.576 1764 | 9.985 2245 | 56 | 20 |    |
|    | 50 | 9.409 1275 | 793 | 9.423 9085 | 850   | 0.576 0915 | 9.985 2189 | 56 | 10 |    |
| 52 | 0  | 9.409 2068 | 793 | 9.423 9935 | 849   | 0.576 0065 | 9.985 2133 | 56 | 0  | 8  |
|    | 10 | 9.409 2861 | 793 | 9.424 0784 | 848   | 0.575 9216 | 9.985 2077 | 56 | 50 |    |
|    | 20 | 9.409 3654 | 793 | 9.424 1632 | 849   | 0.575 8368 | 9.985 2021 | 56 | 40 |    |
|    | 30 | 9.409 4447 | 792 | 9.424 2481 | 849   | 0.575 7519 | 9.985 1965 | 55 | 30 |    |
|    | 40 | 9.409 5239 | 793 | 9.424 3330 | 848   | 0.575 6670 | 9.985 1910 | 56 | 20 |    |
|    | 50 | 9.409 6032 | 792 | 9.424 4178 | 848   | 0.575 5822 | 9.985 1854 | 56 | 10 |    |
| 53 | 0  | 9.409 6824 | 792 | 9.424 5026 | 848   | 0.575 4974 | 9.985 1798 | 56 | 0  | 7  |
|    | 10 | 9.409 7616 | 792 | 9.424 5874 | 848   | 0.575 4126 | 9.985 1742 | 56 | 50 |    |
|    | 20 | 9.409 8408 | 792 | 9.424 6722 | 848   | 0.575 3278 | 9.985 1686 | 56 | 40 |    |
|    | 30 | 9.409 9200 | 792 | 9.424 7570 | 848   | 0.575 2430 | 9.985 1630 | 56 | 30 |    |
|    | 40 | 9.409 9992 | 791 | 9.424 8418 | 848   | 0.575 1582 | 9.985 1574 | 56 | 20 |    |
|    | 50 | 9.410 0783 | 792 | 9.424 9266 | 847   | 0.575 0734 | 9.985 1518 | 56 | 10 |    |
| 54 | 0  | 9.410 1575 | 791 | 9.425 0113 | 847   | 0.574 9887 | 9.985 1462 | 56 | 0  | 6  |
|    | 10 | 9.410 2366 | 791 | 9.425 0960 | 847   | 0.574 9040 | 9.985 1406 | 56 | 50 |    |
|    | 20 | 9.410 3157 | 791 | 9.425 1807 | 847   | 0.574 8193 | 9.985 1350 | 56 | 40 |    |
|    | 30 | 9.410 3948 | 791 | 9.425 2654 | 847   | 0.574 7346 | 9.985 1294 | 56 | 30 |    |
|    | 40 | 9.410 4739 | 790 | 9.425 3501 | 847   | 0.574 6499 | 9.985 1238 | 57 | 20 |    |
|    | 50 | 9.410 5529 | 791 | 9.425 4348 | 846   | 0.574 5652 | 9.985 1181 | 56 | 10 |    |
| 55 | 0  | 9.410 6320 | 790 | 9.425 5194 | 847   | 0.574 4806 | 9.985 1125 | 56 | 0  | 5  |
|    | 10 | 9.410 7110 | 790 | 9.425 6041 | 846   | 0.574 3959 | 9.985 1069 | 56 | 50 |    |
|    | 20 | 9.410 7900 | 790 | 9.425 6887 | 846   | 0.574 3113 | 9.985 1013 | 56 | 40 |    |
|    | 30 | 9.410 8690 | 790 | 9.425 7733 | 846   | 0.574 2267 | 9.985 0957 | 56 | 30 |    |
|    | 40 | 9.410 9480 | 790 | 9.425 8579 | 846   | 0.574 1421 | 9.985 0901 | 56 | 20 |    |
|    | 50 | 9.411 0270 | 789 | 9.425 9425 | 846   | 0.574 0575 | 9.985 0845 | 56 | 10 |    |
| 56 | 0  | 9.411 1059 | 790 | 9.426 0271 | 845   | 0.573 9729 | 9.985 0789 | 57 | 0  | 4  |
|    | 10 | 9.411 1849 | 789 | 9.426 1116 | 846   | 0.573 8884 | 9.985 0732 | 56 | 50 |    |
|    | 20 | 9.411 2638 | 789 | 9.426 1962 | 845   | 0.573 8038 | 9.985 0676 | 56 | 40 |    |
|    | 30 | 9.411 3427 | 789 | 9.426 2807 | 845   | 0.573 7193 | 9.985 0620 | 56 | 30 |    |
|    | 40 | 9.411 4216 | 789 | 9.426 3652 | 845   | 0.573 6348 | 9.985 0564 | 56 | 20 |    |
|    | 50 | 9.411 5005 | 788 | 9.426 4497 | 845   | 0.573 5503 | 9.985 0508 | 56 | 10 |    |
| 57 | 0  | 9.411 5793 | 789 | 9.426 5342 | 845   | 0.573 4658 | 9.985 0452 | 57 | 0  | 3  |
|    | 10 | 9.411 6582 | 788 | 9.426 6187 | 844   | 0.573 3813 | 9.985 0395 | 56 | 50 |    |
|    | 20 | 9.411 7370 | 788 | 9.426 7031 | 844   | 0.573 2969 | 9.985 0339 | 56 | 40 |    |
|    | 30 | 9.411 8158 | 788 | 9.426 7875 | 845   | 0.573 2125 | 9.985 0283 | 56 | 30 |    |
|    | 40 | 9.411 8946 | 788 | 9.426 8720 | 844   | 0.573 1280 | 9.985 0227 | 57 | 20 |    |
|    | 50 | 9.411 9734 | 788 | 9.426 9564 | 844   | 0.573 0436 | 9.985 0170 | 56 | 10 |    |
| 58 | 0  | 9.412 0522 | 787 | 9.427 0408 | 844   | 0.572 9592 | 9.985 0114 | 56 | 0  | 2  |
|    | 10 | 9.412 1309 | 788 | 9.427 1252 | 843   | 0.572 8748 | 9.985 0058 | 57 | 50 |    |
|    | 20 | 9.412 2097 | 787 | 9.427 2095 | 844   | 0.572 7905 | 9.985 0001 | 56 | 40 |    |
|    | 30 | 9.412 2884 | 787 | 9.427 2939 | 843   | 0.572 7061 | 9.984 9945 | 56 | 30 |    |
|    | 40 | 9.412 3671 | 787 | 9.427 3782 | 844   | 0.572 6218 | 9.984 9889 | 57 | 20 |    |
|    | 50 | 9.412 4458 | 787 | 9.427 4626 | 843   | 0.572 5374 | 9.984 9832 | 56 | 10 |    |
| 59 | 0  | 9.412 5245 | 786 | 9.427 5469 | 843   | 0.572 4531 | 9.984 9776 | 56 | 0  | 1  |
|    | 10 | 9.412 6031 | 787 | 9.427 6312 | 843   | 0.572 3688 | 9.984 9720 | 57 | 50 |    |
|    | 20 | 9.412 6818 | 786 | 9.427 7155 | 842   | 0.572 2845 | 9.984 9663 | 56 | 40 |    |
|    | 30 | 9.412 7604 | 786 | 9.427 7997 | 843   | 0.572 2003 | 9.984 9607 | 56 | 30 |    |
|    | 40 | 9.412 8390 | 786 | 9.427 8840 | 843   | 0.572 1160 | 9.984 9551 | 57 | 20 |    |
|    | 50 | 9.412 9176 | 786 | 9.427 9682 | 842   | 0.572 0318 | 9.984 9494 | 56 | 10 |    |
| 60 | 0  | 9.412 9962 | 786 | 9.428 0525 | 843   | 0.571 9475 | 9.984 9438 | 56 | 0  | 0  |
|    | "  | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d. | "  |    |

845  
1 84.5  
2 169.0  
3 253.5  
4 338.0  
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6 507.0  
7 591.5  
8 676.0  
9 760.5

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1 84.0  
2 168.0  
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7 588.0  
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9 756.0

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2 159.0  
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4 318.0  
5 397.5  
6 477.0  
7 556.5  
8 636.0  
9 715.5

790  
1 79.0  
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7 553.0  
8 632.0  
9 711.0

785  
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6 471.0  
7 549.5  
8 628.0  
9 706.5

56  
1 5.6  
2 11.2  
3 16.8  
4 22.4  
5 28.0  
6 33.6  
7 39.2  
8 44.8  
9 50.4



|         | i  | n          | a          | d.         | Tang       | d. e.      | Colg       | Con        | d. | n | i  |
|---------|----|------------|------------|------------|------------|------------|------------|------------|----|---|----|
| 840     | 0  | 0          | 9 413 9962 | 786        | 9 413 0525 | 843        | 9 571 9125 | 9 984 9438 | 57 | 0 | 60 |
| 1 84.0  | 10 | 9 413 7438 | 786        | 9 413 1167 | 843        | 9 571 8641 | 9 984 9438 | 57         | 50 |   |    |
| 1 163.0 | 20 | 9 413 4513 | 785        | 9 413 2000 | 843        | 9 571 7704 | 9 984 9438 | 57         | 40 |   |    |
| 1 354.0 | 30 | 9 413 4319 | 785        | 9 413 2033 | 843        | 9 571 6949 | 9 984 9438 | 57         | 30 |   |    |
| 1 416.0 | 40 | 9 413 4103 | 785        | 9 413 2052 | 843        | 9 571 6015 | 9 984 9438 | 57         | 20 |   |    |
| 1 430.0 | 50 | 9 413 3869 | 785        | 9 413 2113 | 843        | 9 571 5165 | 9 984 9438 | 57         | 10 |   |    |
| 1 493.0 | 1  | 0          | 9 413 4674 | 785        | 9 413 5575 | 843        | 9 571 4325 | 9 984 9438 | 57 | 0 | 59 |
| 1 508.0 | 10 | 9 413 4559 | 785        | 9 413 6417 | 843        | 9 571 4325 | 9 984 9438 | 57         | 50 |   |    |
| 1 674.0 | 20 | 9 413 6141 | 784        | 9 413 7545 | 843        | 9 571 5724 | 9 984 9438 | 57         | 40 |   |    |
| 1 736.0 | 30 | 9 413 7035 | 784        | 9 413 8690 | 843        | 9 571 4624 | 9 984 9438 | 57         | 30 |   |    |
| 1 835   | 40 | 9 413 7814 | 784        | 9 413 8690 | 843        | 9 571 4624 | 9 984 9438 | 57         | 20 |   |    |
| 1 84.0  | 50 | 9 413 8692 | 784        | 9 413 8692 | 843        | 9 571 4624 | 9 984 9438 | 57         | 10 |   |    |
| 1 163.0 | 2  | 0          | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57 | 0 | 58 |
| 1 354.0 | 10 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 50 |   |    |
| 1 416.0 | 20 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 40 |   |    |
| 1 430.0 | 30 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 30 |   |    |
| 1 493.0 | 40 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 20 |   |    |
| 1 508.0 | 50 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 10 |   |    |
| 1 674.0 | 3  | 0          | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57 | 0 | 57 |
| 1 736.0 | 10 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 50 |   |    |
| 1 835   | 20 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 40 |   |    |
| 1 84.0  | 30 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 30 |   |    |
| 1 163.0 | 40 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 20 |   |    |
| 1 354.0 | 50 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 10 |   |    |
| 1 416.0 | 4  | 0          | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57 | 0 | 56 |
| 1 430.0 | 10 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 50 |   |    |
| 1 493.0 | 20 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 40 |   |    |
| 1 508.0 | 30 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 30 |   |    |
| 1 674.0 | 40 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 20 |   |    |
| 1 736.0 | 50 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 10 |   |    |
| 1 835   | 5  | 0          | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57 | 0 | 55 |
| 1 84.0  | 10 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 50 |   |    |
| 1 163.0 | 20 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 40 |   |    |
| 1 354.0 | 30 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 30 |   |    |
| 1 416.0 | 40 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 20 |   |    |
| 1 430.0 | 50 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 10 |   |    |
| 1 493.0 | 6  | 0          | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57 | 0 | 54 |
| 1 508.0 | 10 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 50 |   |    |
| 1 674.0 | 20 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 40 |   |    |
| 1 736.0 | 30 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 30 |   |    |
| 1 835   | 40 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 20 |   |    |
| 1 84.0  | 50 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 10 |   |    |
| 1 163.0 | 7  | 0          | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57 | 0 | 53 |
| 1 354.0 | 10 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 50 |   |    |
| 1 416.0 | 20 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 40 |   |    |
| 1 430.0 | 30 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 30 |   |    |
| 1 493.0 | 40 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 20 |   |    |
| 1 508.0 | 50 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 10 |   |    |
| 1 674.0 | 8  | 0          | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57 | 0 | 52 |
| 1 736.0 | 10 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 50 |   |    |
| 1 835   | 20 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 40 |   |    |
| 1 84.0  | 30 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 30 |   |    |
| 1 163.0 | 40 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 20 |   |    |
| 1 354.0 | 50 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 10 |   |    |
| 1 416.0 | 9  | 0          | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57 | 0 | 51 |
| 1 430.0 | 10 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 50 |   |    |
| 1 493.0 | 20 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 40 |   |    |
| 1 508.0 | 30 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 30 |   |    |
| 1 674.0 | 40 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 20 |   |    |
| 1 736.0 | 50 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 10 |   |    |
| 1 835   | 10 | 0          | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57 | 0 | 50 |
| 1 84.0  | 20 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 50 |   |    |
| 1 163.0 | 30 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 40 |   |    |
| 1 354.0 | 40 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 30 |   |    |
| 1 416.0 | 50 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 20 |   |    |
| 1 430.0 | 10 | 0          | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57 | 0 | 49 |
| 1 493.0 | 20 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 50 |   |    |
| 1 508.0 | 30 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 40 |   |    |
| 1 674.0 | 40 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 30 |   |    |
| 1 736.0 | 50 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 20 |   |    |
| 1 835   | 11 | 0          | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57 | 0 | 48 |
| 1 84.0  | 20 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 50 |   |    |
| 1 163.0 | 30 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 40 |   |    |
| 1 354.0 | 40 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 30 |   |    |
| 1 416.0 | 50 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 20 |   |    |
| 1 430.0 | 12 | 0          | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57 | 0 | 47 |
| 1 493.0 | 20 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 50 |   |    |
| 1 508.0 | 30 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 40 |   |    |
| 1 674.0 | 40 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 30 |   |    |
| 1 736.0 | 50 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 20 |   |    |
| 1 835   | 13 | 0          | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57 | 0 | 46 |
| 1 84.0  | 20 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 50 |   |    |
| 1 163.0 | 30 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 40 |   |    |
| 1 354.0 | 40 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 30 |   |    |
| 1 416.0 | 50 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 20 |   |    |
| 1 430.0 | 14 | 0          | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57 | 0 | 45 |
| 1 493.0 | 20 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 50 |   |    |
| 1 508.0 | 30 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 40 |   |    |
| 1 674.0 | 40 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 30 |   |    |
| 1 736.0 | 50 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 20 |   |    |
| 1 835   | 15 | 0          | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57 | 0 | 44 |
| 1 84.0  | 20 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 50 |   |    |
| 1 163.0 | 30 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 40 |   |    |
| 1 354.0 | 40 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 30 |   |    |
| 1 416.0 | 50 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 20 |   |    |
| 1 430.0 | 16 | 0          | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57 | 0 | 43 |
| 1 493.0 | 20 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 50 |   |    |
| 1 508.0 | 30 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 40 |   |    |
| 1 674.0 | 40 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 30 |   |    |
| 1 736.0 | 50 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 20 |   |    |
| 1 835   | 17 | 0          | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57 | 0 | 42 |
| 1 84.0  | 20 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 50 |   |    |
| 1 163.0 | 30 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 40 |   |    |
| 1 354.0 | 40 | 9 413 9438 | 784        | 9 413 9438 | 843        | 9 571 9438 | 9 984 9438 | 57         | 30 |   |    |
| 1 416.0 | 50 | 9 413 9438 |            |            |            |            |            |            |    |   |    |



|    | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d. | "  |    |
|----|----|------------|-----|------------|-------|------------|------------|----|----|----|
| 10 | 0  | 9.417 6837 | 777 | 9.433 0804 | 834   | 0.566 9196 | 9.984 6033 | 57 | 0  | 50 |
|    | 10 | 9.417 7614 | 777 | 9.433 1638 | 834   | 0.566 8362 | 9.984 5976 | 57 | 50 |    |
|    | 20 | 9.417 8391 | 776 | 9.433 2472 | 833   | 0.566 7528 | 9.984 5919 | 57 | 40 |    |
|    | 30 | 9.417 9167 | 776 | 9.433 3305 | 834   | 0.566 6695 | 9.984 5862 | 57 | 30 |    |
|    | 40 | 9.417 9943 | 776 | 9.433 4139 | 833   | 0.566 5861 | 9.984 5805 | 57 | 20 |    |
|    | 50 | 9.418 0719 | 776 | 9.433 4972 | 833   | 0.566 5028 | 9.984 5748 | 58 | 10 |    |
| 11 | 0  | 9.418 1495 | 776 | 9.433 5805 | 833   | 0.566 4195 | 9.984 5690 | 57 | 0  | 49 |
|    | 10 | 9.418 2271 | 776 | 9.433 6638 | 833   | 0.566 3362 | 9.984 5633 | 57 | 50 |    |
|    | 20 | 9.418 3047 | 775 | 9.433 7471 | 832   | 0.566 2529 | 9.984 5576 | 57 | 40 |    |
|    | 30 | 9.418 3822 | 775 | 9.433 8303 | 833   | 0.566 1697 | 9.984 5519 | 57 | 30 |    |
|    | 40 | 9.418 4597 | 776 | 9.433 9136 | 832   | 0.566 0864 | 9.984 5462 | 57 | 20 |    |
|    | 50 | 9.418 5373 | 775 | 9.433 9968 | 832   | 0.566 0032 | 9.984 5405 | 58 | 10 |    |
| 12 | 0  | 9.418 6148 | 775 | 9.434 0800 | 832   | 0.565 9200 | 9.984 5347 | 57 | 0  | 48 |
|    | 10 | 9.418 6923 | 774 | 9.434 1632 | 832   | 0.565 8368 | 9.984 5290 | 57 | 50 |    |
|    | 20 | 9.418 7697 | 775 | 9.434 2464 | 832   | 0.565 7536 | 9.984 5233 | 57 | 40 |    |
|    | 30 | 9.418 8472 | 774 | 9.434 3296 | 832   | 0.565 6704 | 9.984 5176 | 58 | 30 |    |
|    | 40 | 9.418 9246 | 775 | 9.434 4128 | 831   | 0.565 5872 | 9.984 5118 | 57 | 20 |    |
|    | 50 | 9.419 0021 | 774 | 9.434 4959 | 832   | 0.565 5041 | 9.984 5061 | 57 | 10 |    |
| 13 | 0  | 9.419 0795 | 774 | 9.434 5791 | 831   | 0.565 4209 | 9.984 5004 | 57 | 0  | 47 |
|    | 10 | 9.419 1569 | 774 | 9.434 6622 | 831   | 0.565 3378 | 9.984 4947 | 58 | 50 |    |
|    | 20 | 9.419 2343 | 773 | 9.434 7453 | 831   | 0.565 2547 | 9.984 4889 | 57 | 40 |    |
|    | 30 | 9.419 3116 | 774 | 9.434 8284 | 831   | 0.565 1716 | 9.984 4832 | 57 | 30 |    |
|    | 40 | 9.419 3890 | 774 | 9.434 9115 | 831   | 0.565 0885 | 9.984 4775 | 58 | 20 |    |
|    | 50 | 9.419 4663 | 773 | 9.434 9946 | 830   | 0.565 0054 | 9.984 4717 | 57 | 10 |    |
| 14 | 0  | 9.419 5436 | 774 | 9.435 0776 | 831   | 0.564 9224 | 9.984 4660 | 57 | 0  | 46 |
|    | 10 | 9.419 6210 | 773 | 9.435 1607 | 830   | 0.564 8393 | 9.984 4603 | 58 | 50 |    |
|    | 20 | 9.419 6983 | 772 | 9.435 2437 | 830   | 0.564 7563 | 9.984 4545 | 57 | 40 |    |
|    | 30 | 9.419 7755 | 773 | 9.435 3267 | 830   | 0.564 6733 | 9.984 4488 | 57 | 30 |    |
|    | 40 | 9.419 8528 | 773 | 9.435 4097 | 830   | 0.564 5903 | 9.984 4431 | 58 | 20 |    |
|    | 50 | 9.419 9301 | 772 | 9.435 4927 | 830   | 0.564 5073 | 9.984 4373 | 57 | 10 |    |
| 15 | 0  | 9.420 0073 | 772 | 9.435 5757 | 830   | 0.564 4243 | 9.984 4316 | 58 | 0  | 45 |
|    | 10 | 9.420 0845 | 772 | 9.435 6587 | 829   | 0.564 3413 | 9.984 4258 | 57 | 50 |    |
|    | 20 | 9.420 1617 | 772 | 9.435 7416 | 829   | 0.564 2584 | 9.984 4201 | 57 | 40 |    |
|    | 30 | 9.420 2389 | 772 | 9.435 8245 | 830   | 0.564 1755 | 9.984 4144 | 58 | 30 |    |
|    | 40 | 9.420 3161 | 772 | 9.435 9075 | 829   | 0.564 0925 | 9.984 4086 | 57 | 20 |    |
|    | 50 | 9.420 3933 | 771 | 9.435 9904 | 829   | 0.564 0096 | 9.984 4029 | 58 | 10 |    |
| 16 | 0  | 9.420 4704 | 771 | 9.436 0733 | 829   | 0.563 9267 | 9.984 3971 | 57 | 0  | 44 |
|    | 10 | 9.420 5475 | 772 | 9.436 1562 | 828   | 0.563 8438 | 9.984 3914 | 58 | 50 |    |
|    | 20 | 9.420 6247 | 771 | 9.436 2390 | 829   | 0.563 7610 | 9.984 3856 | 57 | 40 |    |
|    | 30 | 9.420 7018 | 770 | 9.436 3219 | 828   | 0.563 6781 | 9.984 3799 | 57 | 30 |    |
|    | 40 | 9.420 7788 | 771 | 9.436 4047 | 828   | 0.563 5953 | 9.984 3741 | 58 | 20 |    |
|    | 50 | 9.420 8559 | 771 | 9.436 4875 | 829   | 0.563 5125 | 9.984 3684 | 58 | 10 |    |
| 17 | 0  | 9.420 9330 | 770 | 9.436 5704 | 828   | 0.563 4296 | 9.984 3626 | 57 | 0  | 43 |
|    | 10 | 9.421 0100 | 771 | 9.436 6532 | 827   | 0.563 3468 | 9.984 3569 | 58 | 50 |    |
|    | 20 | 9.421 0871 | 770 | 9.436 7359 | 828   | 0.563 2641 | 9.984 3511 | 57 | 40 |    |
|    | 30 | 9.421 1641 | 770 | 9.436 8187 | 828   | 0.563 1813 | 9.984 3454 | 58 | 30 |    |
|    | 40 | 9.421 2411 | 770 | 9.436 9015 | 827   | 0.563 0985 | 9.984 3396 | 58 | 20 |    |
|    | 50 | 9.421 3181 | 769 | 9.436 9842 | 828   | 0.563 0158 | 9.984 3338 | 57 | 10 |    |
| 18 | 0  | 9.421 3950 | 770 | 9.437 0670 | 827   | 0.562 9330 | 9.984 3281 | 58 | 0  | 42 |
|    | 10 | 9.421 4720 | 769 | 9.437 1497 | 827   | 0.562 8503 | 9.984 3223 | 57 | 50 |    |
|    | 20 | 9.421 5489 | 770 | 9.437 2324 | 827   | 0.562 7676 | 9.984 3166 | 58 | 40 |    |
|    | 30 | 9.421 6259 | 769 | 9.437 3151 | 826   | 0.562 6849 | 9.984 3108 | 58 | 30 |    |
|    | 40 | 9.421 7028 | 769 | 9.437 3977 | 827   | 0.562 6023 | 9.984 3050 | 57 | 20 |    |
|    | 50 | 9.421 7797 | 769 | 9.437 4804 | 827   | 0.562 5196 | 9.984 2993 | 58 | 10 |    |
| 19 | 0  | 9.421 8566 | 768 | 9.437 5631 | 826   | 0.562 4369 | 9.984 2935 | 58 | 0  | 41 |
|    | 10 | 9.421 9334 | 769 | 9.437 6457 | 826   | 0.562 3543 | 9.984 2877 | 57 | 50 |    |
|    | 20 | 9.422 0103 | 768 | 9.437 7283 | 826   | 0.562 2717 | 9.984 2820 | 58 | 40 |    |
|    | 30 | 9.422 0871 | 769 | 9.437 8109 | 826   | 0.562 1891 | 9.984 2762 | 58 | 30 |    |
|    | 40 | 9.422 1640 | 768 | 9.437 8935 | 826   | 0.562 1065 | 9.984 2704 | 57 | 20 |    |
|    | 50 | 9.422 2408 | 768 | 9.437 9761 | 826   | 0.562 0239 | 9.984 2647 | 58 | 10 |    |
| 20 | 0  | 9.422 3176 | 768 | 9.438 0587 |       | 0.561 9413 | 9.984 2589 |    | 0  | 40 |

833

1 83.3

2 166.6

3 249.9

4 333.2

5 416.5

6 499.8

7 583.1

8 666.4

9 749.7

830

1 83.0

2 166.0

3 249.0

4 332.0

5 415.0

6 498.0

7 581.0

8 664.0

9 747.0

827

1 82.7

2 165.4

3 248.1

4 330.8

5 413.5

6 496.2

7 578.9

8 661.6

9 744.3

775

1 77.5

2 155.0

3 232.5

4 310.0

5 387.5

6 465.0

7 542.5

8 620.0

9 697.5

770

1 77.0

2 154.0

3 231.0

4 308.0

5 385.0

6 462.0

7 539.0

8 616.0

9 693.0

58

1 5.8

2 11.6

3 17.4

4 23.2

5 29.0

6 34.8

7 40.6

8 46.4

9 52.2



821  
1 84.4  
3 146.8  
1 117.4  
4 110.6  
5 433.0  
6 491.4  
7 476.8  
8 659.4  
9 741.6

831  
1 84.1  
3 164.1  
4 136.1  
5 430.4  
6 490.8  
7 474.2  
8 657.6  
9 738.9

841  
1 84.6  
3 165.6  
4 137.6  
5 431.9  
6 492.3  
7 475.7  
8 659.1  
9 740.4

767  
1 76.7  
3 141.4  
4 116.4  
5 428.4  
6 486.4  
7 470.2  
8 641.6  
9 720.3

763  
1 76.3  
3 141.6  
4 116.6  
5 428.6  
6 486.6  
7 470.4  
8 641.8  
9 720.5

58  
1 5.8  
3 17.4  
4 33.2  
5 49.0  
6 64.8  
7 80.6  
8 96.4  
9 112.2

|    |    | "          | Sin | d.         | Tang | d. c.      | Cotg       | Con | d. | "  |  |
|----|----|------------|-----|------------|------|------------|------------|-----|----|----|--|
| 20 | 0  | 0.342 0176 | 761 | 0.342 0176 | 844  | 0.342 0176 | 0.923 4373 | 58  | 0  | 40 |  |
|    | 10 | 0.342 1381 | 762 | 0.342 1381 | 846  | 0.342 1381 | 0.923 4374 | 59  | 10 |    |  |
|    | 20 | 0.342 2591 | 763 | 0.342 2591 | 848  | 0.342 2591 | 0.923 4375 | 60  | 20 |    |  |
|    | 30 | 0.342 3791 | 764 | 0.342 3791 | 850  | 0.342 3791 | 0.923 4376 | 61  | 30 |    |  |
|    | 40 | 0.342 5001 | 765 | 0.342 5001 | 852  | 0.342 5001 | 0.923 4377 | 62  | 40 |    |  |
|    | 50 | 0.342 6201 | 766 | 0.342 6201 | 854  | 0.342 6201 | 0.923 4378 | 63  | 50 |    |  |
| 21 | 0  | 0.342 7411 | 767 | 0.342 7411 | 856  | 0.342 7411 | 0.923 4379 | 64  | 0  | 39 |  |
|    | 10 | 0.342 8611 | 768 | 0.342 8611 | 858  | 0.342 8611 | 0.923 4380 | 65  | 10 |    |  |
|    | 20 | 0.342 9821 | 769 | 0.342 9821 | 860  | 0.342 9821 | 0.923 4381 | 66  | 20 |    |  |
|    | 30 | 0.343 1021 | 770 | 0.343 1021 | 862  | 0.343 1021 | 0.923 4382 | 67  | 30 |    |  |
|    | 40 | 0.343 2231 | 771 | 0.343 2231 | 864  | 0.343 2231 | 0.923 4383 | 68  | 40 |    |  |
|    | 50 | 0.343 3431 | 772 | 0.343 3431 | 866  | 0.343 3431 | 0.923 4384 | 69  | 50 |    |  |
| 22 | 0  | 0.343 4641 | 773 | 0.343 4641 | 868  | 0.343 4641 | 0.923 4385 | 70  | 0  | 38 |  |
|    | 10 | 0.343 5841 | 774 | 0.343 5841 | 870  | 0.343 5841 | 0.923 4386 | 71  | 10 |    |  |
|    | 20 | 0.343 7051 | 775 | 0.343 7051 | 872  | 0.343 7051 | 0.923 4387 | 72  | 20 |    |  |
|    | 30 | 0.343 8251 | 776 | 0.343 8251 | 874  | 0.343 8251 | 0.923 4388 | 73  | 30 |    |  |
|    | 40 | 0.343 9461 | 777 | 0.343 9461 | 876  | 0.343 9461 | 0.923 4389 | 74  | 40 |    |  |
|    | 50 | 0.344 0661 | 778 | 0.344 0661 | 878  | 0.344 0661 | 0.923 4390 | 75  | 50 |    |  |
| 23 | 0  | 0.344 1871 | 779 | 0.344 1871 | 880  | 0.344 1871 | 0.923 4391 | 76  | 0  | 37 |  |
|    | 10 | 0.344 3071 | 780 | 0.344 3071 | 882  | 0.344 3071 | 0.923 4392 | 77  | 10 |    |  |
|    | 20 | 0.344 4281 | 781 | 0.344 4281 | 884  | 0.344 4281 | 0.923 4393 | 78  | 20 |    |  |
|    | 30 | 0.344 5481 | 782 | 0.344 5481 | 886  | 0.344 5481 | 0.923 4394 | 79  | 30 |    |  |
|    | 40 | 0.344 6691 | 783 | 0.344 6691 | 888  | 0.344 6691 | 0.923 4395 | 80  | 40 |    |  |
|    | 50 | 0.344 7891 | 784 | 0.344 7891 | 890  | 0.344 7891 | 0.923 4396 | 81  | 50 |    |  |
| 24 | 0  | 0.344 9101 | 785 | 0.344 9101 | 892  | 0.344 9101 | 0.923 4397 | 82  | 0  | 36 |  |
|    | 10 | 0.345 0301 | 786 | 0.345 0301 | 894  | 0.345 0301 | 0.923 4398 | 83  | 10 |    |  |
|    | 20 | 0.345 1511 | 787 | 0.345 1511 | 896  | 0.345 1511 | 0.923 4399 | 84  | 20 |    |  |
|    | 30 | 0.345 2711 | 788 | 0.345 2711 | 898  | 0.345 2711 | 0.923 4400 | 85  | 30 |    |  |
|    | 40 | 0.345 3921 | 789 | 0.345 3921 | 900  | 0.345 3921 | 0.923 4401 | 86  | 40 |    |  |
|    | 50 | 0.345 5121 | 790 | 0.345 5121 | 902  | 0.345 5121 | 0.923 4402 | 87  | 50 |    |  |
| 25 | 0  | 0.345 6331 | 791 | 0.345 6331 | 904  | 0.345 6331 | 0.923 4403 | 88  | 0  | 35 |  |
|    | 10 | 0.345 7531 | 792 | 0.345 7531 | 906  | 0.345 7531 | 0.923 4404 | 89  | 10 |    |  |
|    | 20 | 0.345 8741 | 793 | 0.345 8741 | 908  | 0.345 8741 | 0.923 4405 | 90  | 20 |    |  |
|    | 30 | 0.345 9941 | 794 | 0.345 9941 | 910  | 0.345 9941 | 0.923 4406 | 91  | 30 |    |  |
|    | 40 | 0.346 1151 | 795 | 0.346 1151 | 912  | 0.346 1151 | 0.923 4407 | 92  | 40 |    |  |
|    | 50 | 0.346 2351 | 796 | 0.346 2351 | 914  | 0.346 2351 | 0.923 4408 | 93  | 50 |    |  |
| 26 | 0  | 0.346 3561 | 797 | 0.346 3561 | 916  | 0.346 3561 | 0.923 4409 | 94  | 0  | 34 |  |
|    | 10 | 0.346 4761 | 798 | 0.346 4761 | 918  | 0.346 4761 | 0.923 4410 | 95  | 10 |    |  |
|    | 20 | 0.346 5971 | 799 | 0.346 5971 | 920  | 0.346 5971 | 0.923 4411 | 96  | 20 |    |  |
|    | 30 | 0.346 7171 | 800 | 0.346 7171 | 922  | 0.346 7171 | 0.923 4412 | 97  | 30 |    |  |
|    | 40 | 0.346 8381 | 801 | 0.346 8381 | 924  | 0.346 8381 | 0.923 4413 | 98  | 40 |    |  |
|    | 50 | 0.346 9581 | 802 | 0.346 9581 | 926  | 0.346 9581 | 0.923 4414 | 99  | 50 |    |  |
| 27 | 0  | 0.347 0791 | 803 | 0.347 0791 | 928  | 0.347 0791 | 0.923 4415 | 0   | 0  | 33 |  |
|    | 10 | 0.347 1991 | 804 | 0.347 1991 | 930  | 0.347 1991 | 0.923 4416 | 1   | 10 |    |  |
|    | 20 | 0.347 3201 | 805 | 0.347 3201 | 932  | 0.347 3201 | 0.923 4417 | 2   | 20 |    |  |
|    | 30 | 0.347 4401 | 806 | 0.347 4401 | 934  | 0.347 4401 | 0.923 4418 | 3   | 30 |    |  |
|    | 40 | 0.347 5611 | 807 | 0.347 5611 | 936  | 0.347 5611 | 0.923 4419 | 4   | 40 |    |  |
|    | 50 | 0.347 6811 | 808 | 0.347 6811 | 938  | 0.347 6811 | 0.923 4420 | 5   | 50 |    |  |
| 28 | 0  | 0.347 8021 | 809 | 0.347 8021 | 940  | 0.347 8021 | 0.923 4421 | 6   | 0  | 32 |  |
|    | 10 | 0.347 9221 | 810 | 0.347 9221 | 942  | 0.347 9221 | 0.923 4422 | 7   | 10 |    |  |
|    | 20 | 0.348 0431 | 811 | 0.348 0431 | 944  | 0.348 0431 | 0.923 4423 | 8   | 20 |    |  |
|    | 30 | 0.348 1631 | 812 | 0.348 1631 | 946  | 0.348 1631 | 0.923 4424 | 9   | 30 |    |  |
|    | 40 | 0.348 2841 | 813 | 0.348 2841 | 948  | 0.348 2841 | 0.923 4425 | 10  | 40 |    |  |
|    | 50 | 0.348 4041 | 814 | 0.348 4041 | 950  | 0.348 4041 | 0.923 4426 | 11  | 50 |    |  |
| 29 | 0  | 0.348 5251 | 815 | 0.348 5251 | 952  | 0.348 5251 | 0.923 4427 | 12  | 0  | 31 |  |
|    | 10 | 0.348 6451 | 816 | 0.348 6451 | 954  | 0.348 6451 | 0.923 4428 | 13  | 10 |    |  |
|    | 20 | 0.348 7661 | 817 | 0.348 7661 | 956  | 0.348 7661 | 0.923 4429 | 14  | 20 |    |  |
|    | 30 | 0.348 8861 | 818 | 0.348 8861 | 958  | 0.348 8861 | 0.923 4430 | 15  | 30 |    |  |
|    | 40 | 0.349 0071 | 819 | 0.349 0071 | 960  | 0.349 0071 | 0.923 4431 | 16  | 40 |    |  |
|    | 50 | 0.349 1271 | 820 | 0.349 1271 | 962  | 0.349 1271 | 0.923 4432 | 17  | 50 |    |  |
| 30 | 0  | 0.349 2481 | 821 | 0.349 2481 | 964  | 0.349 2481 | 0.923 4433 | 18  | 0  | 30 |  |
|    | 10 | 0.349 3681 | 822 | 0.349 3681 | 966  | 0.349 3681 | 0.923 4434 | 19  | 10 |    |  |
|    | 20 | 0.349 4891 | 823 | 0.349 4891 | 968  | 0.349 4891 | 0.923 4435 | 20  | 20 |    |  |
|    | 30 | 0.349 6091 | 824 | 0.349 6091 | 970  | 0.349 6091 | 0.923 4436 | 21  | 30 |    |  |
|    | 40 | 0.349 7301 | 825 | 0.349 7301 | 972  | 0.349 7301 | 0.923 4437 | 22  | 40 |    |  |
|    | 50 | 0.349 8501 | 826 | 0.349 8501 | 974  | 0.349 8501 | 0.923 4438 | 23  | 50 |    |  |
| 31 | 0  | 0.349 9711 | 827 | 0.349 9711 | 976  | 0.349 9711 | 0.923 4439 | 24  | 0  | 29 |  |
|    | 10 | 0.350 0911 | 828 | 0.350 0911 | 978  | 0.350 0911 | 0.923 4440 | 25  | 10 |    |  |
|    | 20 | 0.350 2121 | 829 | 0.350 2121 | 980  | 0.350 2121 | 0.923 4441 | 26  | 20 |    |  |
|    | 30 | 0.350 3321 | 830 | 0.350 3321 | 982  | 0.350 3321 | 0.923 4442 | 27  | 30 |    |  |
|    | 40 | 0.350 4531 | 831 | 0.350 4531 | 984  | 0.350 4531 | 0.923 4443 | 28  | 40 |    |  |
|    | 50 | 0.350 5731 | 832 | 0.350 5731 | 986  | 0.350 5731 | 0.923 4444 | 29  | 50 |    |  |
| 32 | 0  | 0.350 6941 | 833 | 0.350 6941 | 988  | 0.350 6941 | 0.923 4445 | 30  | 0  | 28 |  |
|    | 10 | 0.350 8141 | 834 | 0.350 8141 | 990  | 0.350 8141 | 0.923 4446 | 31  | 10 |    |  |
|    | 20 | 0.350 9351 | 835 | 0.350 9351 | 992  | 0.350 9351 | 0.923 4447 | 32  | 20 |    |  |
|    | 30 | 0.351 0551 | 836 | 0.351 0551 | 994  | 0.351 0551 | 0.923 4448 | 33  | 30 |    |  |
|    | 40 | 0.351 1761 | 837 | 0.351 1761 | 996  | 0.351 1761 | 0.923 4449 | 34  | 40 |    |  |
|    | 50 | 0.351 2961 | 838 | 0.351 2961 | 998  | 0.351 2961 | 0.923 4450 | 35  | 50 |    |  |
| 33 | 0  | 0.351 4171 | 839 | 0.351 4171 | 1000 | 0.351 4171 | 0.923 4451 | 36  | 0  | 27 |  |
|    | 10 | 0.351 5371 | 840 | 0.351 5371 | 1002 | 0.351 5371 | 0.923 4452 | 37  | 10 |    |  |
|    | 20 | 0.351 6581 | 841 | 0.351 6581 | 1004 | 0.351 6581 | 0.923 4453 | 38  | 20 |    |  |
|    | 30 | 0.351 7781 | 842 | 0.351 7781 | 1006 | 0.351 7781 | 0.923 4454 | 39  | 30 |    |  |
|    | 40 | 0.351 8991 | 843 | 0.351 8991 | 1008 | 0.351 8991 | 0.923 4455 | 40  | 40 |    |  |
|    | 50 | 0.352 0191 | 844 | 0.352 0191 | 1010 | 0.352 0191 | 0.923 4456 | 41  | 50 |    |  |
| 34 | 0  | 0.352 1401 | 845 | 0.352 1401 | 1012 | 0.352 1401 | 0.923 4457 | 42  | 0  | 26 |  |
|    | 10 | 0.352 2601 | 846 | 0.352 2601 | 1014 | 0.352 2601 | 0.923 4458 | 43  | 10 |    |  |
|    | 20 | 0.352 3811 | 847 | 0.352 3811 | 1016 | 0.352 3811 | 0.923 4459 | 44  | 20 |    |  |
|    | 30 | 0.352 5011 | 848 | 0.352 5011 | 1018 | 0.352 5011 | 0.923 4460 | 45  | 30 |    |  |
|    | 40 | 0.352 6221 | 849 | 0.352 6221 | 1020 | 0.352 6221 | 0.923 4461 | 46  | 40 |    |  |
|    | 50 | 0.352 7421 | 850 | 0.352 7421 | 1022 | 0.352 7421 | 0.923 4462 | 47  | 50 |    |  |
| 35 | 0  | 0.352 8631 | 851 | 0.352 8631 | 1024 | 0.352 8631 | 0.923 4463 | 48  | 0  | 25 |  |
|    | 10 | 0.352 9831 | 852 | 0.352 9831 | 1026 | 0.352 9831 | 0.923 4464 | 49  | 10 |    |  |
|    | 20 | 0.353 1041 | 853 | 0.353 1041 | 1028 | 0.353 1041 | 0.923 4465 | 50  | 20 |    |  |
|    | 30 | 0.353 2241 | 854 | 0.353 2241 | 1030 | 0.353 2241 | 0.923 4466 | 51  | 30 |    |  |
|    | 40 | 0.353 3451 | 855 | 0.353 3451 | 1032 | 0.353 3451 | 0.923 4467 | 52  | 40 |    |  |
|    | 50 | 0.353 4651 | 856 | 0.353 4651 | 1034 | 0.353 4651 | 0.923 4468 | 53  | 50 |    |  |
| 36 | 0  | 0.353 5861 | 857 | 0.353 5861 | 1036 | 0.353 5861 | 0.923 4469 | 54  | 0  | 24 |  |
|    | 10 | 0.353 7061 | 858 | 0.353 7061 | 1038 | 0.353 7061 | 0.923 4470 | 55  | 10 |    |  |
|    | 20 | 0.353 8271 | 859 | 0.353 8271 | 1040 | 0.353 8271 | 0.923 4471 | 56  | 20 |    |  |
|    | 30 | 0.353 9471 | 860 | 0.353 9471 | 1042 | 0.353 9471 | 0.923 4472 | 57  | 30 |    |  |
|    | 40 | 0.354 0681 | 861 | 0.354 0681 | 1044 | 0.354 0681 | 0.923 4473 | 58  | 40 |    |  |
|    | 50 | 0.354 1881 | 862 | 0.354 1881 | 1046 | 0.354 1881 | 0.923 4474 |     |    |    |  |



| i  | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d. | "  | i  |
|----|----|------------|-----|------------|-------|------------|------------|----|----|----|
| 30 | 0  | 9.426 8988 | 759 | 9.442 9883 | 818   | 0.557 0117 | 9.983 9105 | 58 | 0  | 30 |
|    | 10 | 9.426 9747 | 759 | 9.443 0701 | 817   | 0.556 9299 | 9.983 9047 | 59 | 50 |    |
|    | 20 | 9.427 0506 | 759 | 9.443 1518 | 817   | 0.556 8482 | 9.983 8988 | 59 | 40 |    |
|    | 30 | 9.427 1265 | 759 | 9.443 2335 | 817   | 0.556 7665 | 9.983 8930 | 58 | 30 |    |
|    | 40 | 9.427 2024 | 759 | 9.443 3152 | 818   | 0.556 6848 | 9.983 8872 | 59 | 20 |    |
|    | 50 | 9.427 2783 | 758 | 9.443 3970 | 816   | 0.556 6030 | 9.983 8813 | 58 | 10 |    |
| 31 | 0  | 9.427 3541 | 758 | 9.443 4786 | 817   | 0.556 5214 | 9.983 8755 | 59 | 0  | 29 |
|    | 10 | 9.427 4299 | 758 | 9.443 5603 | 817   | 0.556 4397 | 9.983 8696 | 58 | 50 |    |
|    | 20 | 9.427 5057 | 758 | 9.443 6420 | 816   | 0.556 3580 | 9.983 8638 | 58 | 40 |    |
|    | 30 | 9.427 5815 | 758 | 9.443 7236 | 817   | 0.556 2764 | 9.983 8579 | 59 | 30 |    |
|    | 40 | 9.427 6573 | 758 | 9.443 8053 | 816   | 0.556 1947 | 9.983 8521 | 58 | 20 |    |
|    | 50 | 9.427 7331 | 758 | 9.443 8869 | 816   | 0.556 1131 | 9.983 8462 | 58 | 10 |    |
| 32 | 0  | 9.427 8089 | 757 | 9.443 9685 | 816   | 0.556 0315 | 9.983 8404 | 59 | 0  | 28 |
|    | 10 | 9.427 8846 | 757 | 9.444 0501 | 816   | 0.555 9499 | 9.983 8345 | 58 | 50 |    |
|    | 20 | 9.427 9603 | 758 | 9.444 1317 | 816   | 0.555 8683 | 9.983 8287 | 58 | 40 |    |
|    | 30 | 9.428 0361 | 757 | 9.444 2133 | 815   | 0.555 7867 | 9.983 8228 | 59 | 30 |    |
|    | 40 | 9.428 1118 | 756 | 9.444 2948 | 816   | 0.555 7052 | 9.983 8169 | 58 | 20 |    |
|    | 50 | 9.428 1874 | 757 | 9.444 3764 | 815   | 0.555 6236 | 9.983 8111 | 59 | 10 |    |
| 33 | 0  | 9.428 2631 | 757 | 9.444 4579 | 815   | 0.555 5421 | 9.983 8052 | 58 | 0  | 27 |
|    | 10 | 9.428 3388 | 756 | 9.444 5394 | 815   | 0.555 4606 | 9.983 7994 | 59 | 50 |    |
|    | 20 | 9.428 4144 | 757 | 9.444 6209 | 815   | 0.555 3791 | 9.983 7935 | 58 | 40 |    |
|    | 30 | 9.428 4901 | 756 | 9.444 7024 | 815   | 0.555 2976 | 9.983 7877 | 59 | 30 |    |
|    | 40 | 9.428 5657 | 756 | 9.444 7839 | 814   | 0.555 2161 | 9.983 7818 | 59 | 20 |    |
|    | 50 | 9.428 6413 | 756 | 9.444 8653 | 815   | 0.555 1347 | 9.983 7759 | 58 | 10 |    |
| 34 | 0  | 9.428 7169 | 755 | 9.444 9468 | 814   | 0.555 0532 | 9.983 7701 | 59 | 0  | 26 |
|    | 10 | 9.428 7924 | 756 | 9.445 0282 | 815   | 0.554 9718 | 9.983 7642 | 59 | 50 |    |
|    | 20 | 9.428 8680 | 755 | 9.445 1097 | 814   | 0.554 8903 | 9.983 7583 | 58 | 40 |    |
|    | 30 | 9.428 9435 | 756 | 9.445 1911 | 814   | 0.554 8089 | 9.983 7525 | 59 | 30 |    |
|    | 40 | 9.429 0191 | 755 | 9.445 2725 | 814   | 0.554 7275 | 9.983 7466 | 59 | 20 |    |
|    | 50 | 9.429 0946 | 755 | 9.445 3539 | 813   | 0.554 6461 | 9.983 7407 | 59 | 10 |    |
| 35 | 0  | 9.429 1701 | 755 | 9.445 4352 | 814   | 0.554 5648 | 9.983 7348 | 58 | 0  | 25 |
|    | 10 | 9.429 2456 | 755 | 9.445 5166 | 814   | 0.554 4834 | 9.983 7290 | 59 | 50 |    |
|    | 20 | 9.429 3211 | 754 | 9.445 5980 | 813   | 0.554 4020 | 9.983 7231 | 59 | 40 |    |
|    | 30 | 9.429 3965 | 755 | 9.445 6793 | 813   | 0.554 3207 | 9.983 7172 | 58 | 30 |    |
|    | 40 | 9.429 4720 | 754 | 9.445 7606 | 813   | 0.554 2394 | 9.983 7114 | 59 | 20 |    |
|    | 50 | 9.429 5474 | 754 | 9.445 8419 | 813   | 0.554 1581 | 9.983 7055 | 59 | 10 |    |
| 36 | 0  | 9.429 6228 | 754 | 9.445 9232 | 813   | 0.554 0768 | 9.983 6996 | 59 | 0  | 24 |
|    | 10 | 9.429 6982 | 754 | 9.446 0045 | 813   | 0.553 9955 | 9.983 6937 | 59 | 50 |    |
|    | 20 | 9.429 7736 | 754 | 9.446 0858 | 812   | 0.553 9142 | 9.983 6878 | 58 | 40 |    |
|    | 30 | 9.429 8490 | 753 | 9.446 1670 | 813   | 0.553 8330 | 9.983 6820 | 59 | 30 |    |
|    | 40 | 9.429 9243 | 754 | 9.446 2483 | 812   | 0.553 7517 | 9.983 6761 | 59 | 20 |    |
|    | 50 | 9.429 9997 | 753 | 9.446 3295 | 812   | 0.553 6705 | 9.983 6702 | 59 | 10 |    |
| 37 | 0  | 9.430 0750 | 753 | 9.446 4107 | 812   | 0.553 5893 | 9.983 6643 | 59 | 0  | 23 |
|    | 10 | 9.430 1503 | 754 | 9.446 4919 | 812   | 0.553 5081 | 9.983 6584 | 59 | 50 |    |
|    | 20 | 9.430 2257 | 752 | 9.446 5731 | 812   | 0.553 4269 | 9.983 6525 | 59 | 40 |    |
|    | 30 | 9.430 3009 | 753 | 9.446 6543 | 812   | 0.553 3457 | 9.983 6466 | 58 | 30 |    |
|    | 40 | 9.430 3762 | 753 | 9.446 7355 | 811   | 0.553 2645 | 9.983 6408 | 59 | 20 |    |
|    | 50 | 9.430 4515 | 752 | 9.446 8166 | 812   | 0.553 1834 | 9.983 6349 | 59 | 10 |    |
| 38 | 0  | 9.430 5267 | 753 | 9.446 8978 | 811   | 0.553 1022 | 9.983 6290 | 59 | 0  | 22 |
|    | 10 | 9.430 6020 | 752 | 9.446 9789 | 811   | 0.553 0211 | 9.983 6231 | 59 | 50 |    |
|    | 20 | 9.430 6772 | 752 | 9.447 0600 | 811   | 0.552 9400 | 9.983 6172 | 59 | 40 |    |
|    | 30 | 9.430 7524 | 752 | 9.447 1411 | 811   | 0.552 8589 | 9.983 6113 | 59 | 30 |    |
|    | 40 | 9.430 8276 | 752 | 9.447 2222 | 811   | 0.552 7778 | 9.983 6054 | 59 | 20 |    |
|    | 50 | 9.430 9028 | 751 | 9.447 3033 | 810   | 0.552 6967 | 9.983 5995 | 59 | 10 |    |
| 39 | 0  | 9.430 9779 | 752 | 9.447 3843 | 811   | 0.552 6157 | 9.983 5936 | 59 | 0  | 21 |
|    | 10 | 9.431 0531 | 751 | 9.447 4654 | 810   | 0.552 5346 | 9.983 5877 | 59 | 50 |    |
|    | 20 | 9.431 1282 | 751 | 9.447 5464 | 810   | 0.552 4536 | 9.983 5818 | 59 | 40 |    |
|    | 30 | 9.431 2033 | 752 | 9.447 6274 | 811   | 0.552 3726 | 9.983 5759 | 59 | 30 |    |
|    | 40 | 9.431 2785 | 750 | 9.447 7085 | 810   | 0.552 2915 | 9.983 5700 | 59 | 20 |    |
|    | 50 | 9.431 3535 | 751 | 9.447 7895 | 809   | 0.552 2105 | 9.983 5641 | 59 | 10 |    |
| 40 | 0  | 9.431 4286 | 751 | 9.447 8704 |       | 0.552 1296 | 9.983 5582 | 59 | 0  | 20 |
| i  | "  | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d. | "  | i  |

815  
1 81.5  
2 163.0  
3 244.5  
4 326.0  
5 407.5  
6 489.0  
7 570.5  
8 652.0  
9 733.5

812  
1 81.2  
2 164.4  
3 243.6  
4 324.8  
5 406.0  
6 487.2  
7 568.4  
8 649.6  
9 730.8

759  
1 75.9  
2 151.8  
3 227.7  
4 303.6  
5 379.5  
6 455.4  
7 531.3  
8 607.1  
9 683.1

755  
1 75.5  
2 151.0  
3 226.5  
4 302.0  
5 377.5  
6 453.0  
7 528.5  
8 604.0  
9 679.5

751  
1 75.1  
2 150.2  
3 225.3  
4 300.4  
5 375.5  
6 450.6  
7 525.7  
8 600.8  
9 675.9

59  
1 5.9  
2 11.8  
3 17.7  
4 23.6  
5 29.5  
6 35.4  
7 41.3  
8 47.2  
9 53.1



|         |    | Sin        | d.  | Tang       | d. c. | Cotg       | Sec        | d. |    |    |
|---------|----|------------|-----|------------|-------|------------|------------|----|----|----|
|         | 40 | 0 111 4286 | 751 | 0 147 8704 | 810   | 0 557 1326 | 0 931 3538 | 59 | 0  | 20 |
| 808     | 10 | 0 111 5047 | 751 | 0 147 9311 | 810   | 0 557 1326 | 0 931 3538 | 59 | 1  |    |
| 1 306.1 | 20 | 0 111 5787 | 751 | 0 148 0111 | 810   | 0 557 1326 | 0 931 3538 | 59 | 2  |    |
| 2 604.6 | 30 | 0 111 6518 | 751 | 0 148 0911 | 810   | 0 557 1326 | 0 931 3538 | 59 | 3  |    |
| 3 903.1 | 40 | 0 111 7249 | 751 | 0 148 1711 | 810   | 0 557 1326 | 0 931 3538 | 59 | 4  |    |
| 5 201.6 | 50 | 0 111 7980 | 751 | 0 148 2511 | 810   | 0 557 1326 | 0 931 3538 | 59 | 5  |    |
| 6 499.1 |    |            |     |            |       |            |            |    |    |    |
| 7 796.6 | 41 | 0 111 8711 | 751 | 0 148 3311 | 810   | 0 557 1326 | 0 931 3538 | 59 | 6  |    |
| 9 094.1 | 10 | 0 111 9442 | 751 | 0 148 4111 | 810   | 0 557 1326 | 0 931 3538 | 59 | 7  |    |
| 9 391.6 | 20 | 0 112 0173 | 751 | 0 148 4911 | 810   | 0 557 1326 | 0 931 3538 | 59 | 8  |    |
|         | 30 | 0 112 0904 | 751 | 0 148 5711 | 810   | 0 557 1326 | 0 931 3538 | 59 | 9  |    |
|         | 40 | 0 112 1635 | 751 | 0 148 6511 | 810   | 0 557 1326 | 0 931 3538 | 59 | 10 |    |
|         | 50 | 0 112 2366 | 751 | 0 148 7311 | 810   | 0 557 1326 | 0 931 3538 | 59 | 11 |    |
| 809     |    |            |     |            |       |            |            |    |    |    |
| 1 306.6 | 42 | 0 112 3097 | 751 | 0 148 8111 | 810   | 0 557 1326 | 0 931 3538 | 59 | 12 |    |
| 2 604.1 | 10 | 0 112 3828 | 751 | 0 148 8911 | 810   | 0 557 1326 | 0 931 3538 | 59 | 13 |    |
| 3 902.6 | 20 | 0 112 4559 | 751 | 0 148 9711 | 810   | 0 557 1326 | 0 931 3538 | 59 | 14 |    |
| 5 200.1 | 30 | 0 112 5290 | 751 | 0 149 0511 | 810   | 0 557 1326 | 0 931 3538 | 59 | 15 |    |
| 6 497.6 | 40 | 0 112 6021 | 751 | 0 149 1311 | 810   | 0 557 1326 | 0 931 3538 | 59 | 16 |    |
| 7 795.1 | 50 | 0 112 6752 | 751 | 0 149 2111 | 810   | 0 557 1326 | 0 931 3538 | 59 | 17 |    |
| 9 092.6 |    |            |     |            |       |            |            |    |    |    |
| 9 389.1 | 43 | 0 112 7483 | 751 | 0 149 2911 | 810   | 0 557 1326 | 0 931 3538 | 59 | 18 |    |
|         | 10 | 0 112 8214 | 751 | 0 149 3711 | 810   | 0 557 1326 | 0 931 3538 | 59 | 19 |    |
|         | 20 | 0 112 8945 | 751 | 0 149 4511 | 810   | 0 557 1326 | 0 931 3538 | 59 | 20 |    |
|         | 30 | 0 112 9676 | 751 | 0 149 5311 | 810   | 0 557 1326 | 0 931 3538 | 59 | 21 |    |
|         | 40 | 0 113 0407 | 751 | 0 149 6111 | 810   | 0 557 1326 | 0 931 3538 | 59 | 22 |    |
|         | 50 | 0 113 1138 | 751 | 0 149 6911 | 810   | 0 557 1326 | 0 931 3538 | 59 | 23 |    |
| 810     |    |            |     |            |       |            |            |    |    |    |
| 1 306.1 | 44 | 0 113 1869 | 751 | 0 149 7711 | 810   | 0 557 1326 | 0 931 3538 | 59 | 24 |    |
| 2 603.6 | 10 | 0 113 2600 | 751 | 0 149 8511 | 810   | 0 557 1326 | 0 931 3538 | 59 | 25 |    |
| 3 901.1 | 20 | 0 113 3331 | 751 | 0 149 9311 | 810   | 0 557 1326 | 0 931 3538 | 59 | 26 |    |
| 5 200.6 | 30 | 0 113 4062 | 751 | 0 150 0111 | 810   | 0 557 1326 | 0 931 3538 | 59 | 27 |    |
| 6 498.1 | 40 | 0 113 4793 | 751 | 0 150 0911 | 810   | 0 557 1326 | 0 931 3538 | 59 | 28 |    |
| 7 795.6 | 50 | 0 113 5524 | 751 | 0 150 1711 | 810   | 0 557 1326 | 0 931 3538 | 59 | 29 |    |
| 9 093.1 |    |            |     |            |       |            |            |    |    |    |
| 9 389.6 | 45 | 0 113 6255 | 751 | 0 150 2511 | 810   | 0 557 1326 | 0 931 3538 | 59 | 30 |    |
|         | 10 | 0 113 6986 | 751 | 0 150 3311 | 810   | 0 557 1326 | 0 931 3538 | 59 | 31 |    |
|         | 20 | 0 113 7717 | 751 | 0 150 4111 | 810   | 0 557 1326 | 0 931 3538 | 59 | 32 |    |
|         | 30 | 0 113 8448 | 751 | 0 150 4911 | 810   | 0 557 1326 | 0 931 3538 | 59 | 33 |    |
|         | 40 | 0 113 9179 | 751 | 0 150 5711 | 810   | 0 557 1326 | 0 931 3538 | 59 | 34 |    |
|         | 50 | 0 113 9910 | 751 | 0 150 6511 | 810   | 0 557 1326 | 0 931 3538 | 59 | 35 |    |
| 811     |    |            |     |            |       |            |            |    |    |    |
| 1 306.6 | 46 | 0 114 0641 | 751 | 0 150 7311 | 810   | 0 557 1326 | 0 931 3538 | 59 | 36 |    |
| 2 604.1 | 10 | 0 114 1372 | 751 | 0 150 8111 | 810   | 0 557 1326 | 0 931 3538 | 59 | 37 |    |
| 3 902.6 | 20 | 0 114 2103 | 751 | 0 150 8911 | 810   | 0 557 1326 | 0 931 3538 | 59 | 38 |    |
| 5 201.1 | 30 | 0 114 2834 | 751 | 0 150 9711 | 810   | 0 557 1326 | 0 931 3538 | 59 | 39 |    |
| 6 499.6 | 40 | 0 114 3565 | 751 | 0 151 0511 | 810   | 0 557 1326 | 0 931 3538 | 59 | 40 |    |
| 7 797.1 | 50 | 0 114 4296 | 751 | 0 151 1311 | 810   | 0 557 1326 | 0 931 3538 | 59 | 41 |    |
| 9 094.6 |    |            |     |            |       |            |            |    |    |    |
| 9 390.1 | 47 | 0 114 5027 | 751 | 0 151 2111 | 810   | 0 557 1326 | 0 931 3538 | 59 | 42 |    |
|         | 10 | 0 114 5758 | 751 | 0 151 2911 | 810   | 0 557 1326 | 0 931 3538 | 59 | 43 |    |
|         | 20 | 0 114 6489 | 751 | 0 151 3711 | 810   | 0 557 1326 | 0 931 3538 | 59 | 44 |    |
|         | 30 | 0 114 7220 | 751 | 0 151 4511 | 810   | 0 557 1326 | 0 931 3538 | 59 | 45 |    |
|         | 40 | 0 114 7951 | 751 | 0 151 5311 | 810   | 0 557 1326 | 0 931 3538 | 59 | 46 |    |
|         | 50 | 0 114 8682 | 751 | 0 151 6111 | 810   | 0 557 1326 | 0 931 3538 | 59 | 47 |    |
| 812     |    |            |     |            |       |            |            |    |    |    |
| 1 307.1 | 48 | 0 114 9413 | 751 | 0 151 6911 | 810   | 0 557 1326 | 0 931 3538 | 59 | 48 |    |
| 2 605.6 | 10 | 0 115 0144 | 751 | 0 151 7711 | 810   | 0 557 1326 | 0 931 3538 | 59 | 49 |    |
| 3 903.1 | 20 | 0 115 0875 | 751 | 0 151 8511 | 810   | 0 557 1326 | 0 931 3538 | 59 | 50 |    |
| 5 202.6 | 30 | 0 115 1606 | 751 | 0 151 9311 | 810   | 0 557 1326 | 0 931 3538 | 59 | 51 |    |
| 6 500.1 | 40 | 0 115 2337 | 751 | 0 152 0111 | 810   | 0 557 1326 | 0 931 3538 | 59 | 52 |    |
| 7 797.6 | 50 | 0 115 3068 | 751 | 0 152 0911 | 810   | 0 557 1326 | 0 931 3538 | 59 | 53 |    |
| 9 095.1 |    |            |     |            |       |            |            |    |    |    |
| 9 390.6 | 49 | 0 115 3799 | 751 | 0 152 1711 | 810   | 0 557 1326 | 0 931 3538 | 59 | 54 |    |
|         | 10 | 0 115 4530 | 751 | 0 152 2511 | 810   | 0 557 1326 | 0 931 3538 | 59 | 55 |    |
|         | 20 | 0 115 5261 | 751 | 0 152 3311 | 810   | 0 557 1326 | 0 931 3538 | 59 | 56 |    |
|         | 30 | 0 115 5992 | 751 | 0 152 4111 | 810   | 0 557 1326 | 0 931 3538 | 59 | 57 |    |
|         | 40 | 0 115 6723 | 751 | 0 152 4911 | 810   | 0 557 1326 | 0 931 3538 | 59 | 58 |    |
|         | 50 | 0 115 7454 | 751 | 0 152 5711 | 810   | 0 557 1326 | 0 931 3538 | 59 | 59 |    |
| 813     |    |            |     |            |       |            |            |    |    |    |
| 1 307.6 | 50 | 0 115 8185 | 751 | 0 152 6511 | 810   | 0 557 1326 | 0 931 3538 | 59 | 60 |    |
| 2 606.1 |    |            |     |            |       |            |            |    |    |    |
| 3 904.6 |    |            |     |            |       |            |            |    |    |    |
| 5 203.1 |    |            |     |            |       |            |            |    |    |    |
| 6 501.6 |    |            |     |            |       |            |            |    |    |    |
| 7 798.1 |    |            |     |            |       |            |            |    |    |    |
| 9 095.6 |    |            |     |            |       |            |            |    |    |    |
| 9 391.1 |    |            |     |            |       |            |            |    |    |    |



| "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d. | "  | '  |
|----|------------|-----|------------|-------|------------|------------|----|----|----|
| 0  | 9.435 9080 | 743 | 9.452 7061 | 802   | 0.547 2939 | 9.983 2019 | 60 | 0  | 10 |
| 10 | 9.435 9823 | 742 | 9.452 7863 | 802   | 0.547 2137 | 9.983 1959 | 59 | 50 |    |
| 20 | 9.436 0565 | 742 | 9.452 8665 | 802   | 0.547 1335 | 9.983 1900 | 59 | 40 |    |
| 30 | 9.436 1307 | 742 | 9.452 9467 | 802   | 0.547 0533 | 9.983 1840 | 60 | 30 |    |
| 40 | 9.436 2049 | 742 | 9.453 0269 | 801   | 0.546 9731 | 9.983 1780 | 60 | 20 |    |
| 50 | 9.436 2791 | 741 | 9.453 1070 | 802   | 0.546 8930 | 9.983 1720 | 60 | 10 |    |
| 0  | 9.436 3532 | 742 | 9.453 1872 | 801   | 0.546 8128 | 9.983 1661 | 59 | 0  | 9  |
| 10 | 9.436 4274 | 741 | 9.453 2673 | 801   | 0.546 7327 | 9.983 1601 | 60 | 50 |    |
| 20 | 9.436 5015 | 742 | 9.453 3474 | 802   | 0.546 6526 | 9.983 1541 | 60 | 40 |    |
| 30 | 9.436 5757 | 741 | 9.453 4276 | 800   | 0.546 5724 | 9.983 1481 | 60 | 30 |    |
| 40 | 9.436 6498 | 741 | 9.453 5076 | 801   | 0.546 4924 | 9.983 1421 | 60 | 20 |    |
| 50 | 9.436 7239 | 741 | 9.453 5877 | 801   | 0.546 4123 | 9.983 1361 | 59 | 10 |    |
| 0  | 9.436 7980 | 740 | 9.453 6678 | 801   | 0.546 3322 | 9.983 1302 | 60 | 0  | 8  |
| 10 | 9.436 8720 | 741 | 9.453 7479 | 800   | 0.546 2521 | 9.983 1242 | 60 | 50 |    |
| 20 | 9.436 9461 | 740 | 9.453 8279 | 800   | 0.546 1721 | 9.983 1182 | 60 | 40 |    |
| 30 | 9.437 0201 | 741 | 9.453 9079 | 800   | 0.546 0921 | 9.983 1122 | 60 | 30 |    |
| 40 | 9.437 0942 | 740 | 9.453 9879 | 801   | 0.546 0121 | 9.983 1062 | 60 | 20 |    |
| 50 | 9.437 1682 | 740 | 9.454 0680 | 799   | 0.545 9320 | 9.983 1002 | 60 | 10 |    |
| 0  | 9.437 2422 | 740 | 9.454 1479 | 800   | 0.545 8521 | 9.983 0942 | 60 | 0  | 7  |
| 10 | 9.437 3162 | 740 | 9.454 2279 | 800   | 0.545 7721 | 9.983 0882 | 59 | 50 |    |
| 20 | 9.437 3902 | 739 | 9.454 3079 | 800   | 0.545 6921 | 9.983 0823 | 60 | 40 |    |
| 30 | 9.437 4641 | 740 | 9.454 3879 | 799   | 0.545 6121 | 9.983 0763 | 60 | 30 |    |
| 40 | 9.437 5381 | 739 | 9.454 4678 | 799   | 0.545 5322 | 9.983 0703 | 60 | 20 |    |
| 50 | 9.437 6120 | 739 | 9.454 5477 | 799   | 0.545 4523 | 9.983 0643 | 60 | 10 |    |
| 0  | 9.437 6859 | 739 | 9.454 6276 | 800   | 0.545 3724 | 9.983 0583 | 60 | 0  | 6  |
| 10 | 9.437 7598 | 739 | 9.454 7076 | 798   | 0.545 2924 | 9.983 0523 | 60 | 50 |    |
| 20 | 9.437 8337 | 739 | 9.454 7874 | 799   | 0.545 2126 | 9.983 0463 | 60 | 40 |    |
| 30 | 9.437 9076 | 739 | 9.454 8673 | 799   | 0.545 1327 | 9.983 0403 | 60 | 30 |    |
| 40 | 9.437 9815 | 738 | 9.454 9472 | 799   | 0.545 0528 | 9.983 0343 | 60 | 20 |    |
| 50 | 9.438 0553 | 739 | 9.455 0271 | 798   | 0.544 9729 | 9.983 0283 | 60 | 10 |    |
| 0  | 9.438 1292 | 738 | 9.455 1069 | 798   | 0.544 8931 | 9.983 0223 | 60 | 0  | 5  |
| 10 | 9.438 2030 | 738 | 9.455 1867 | 798   | 0.544 8133 | 9.983 0163 | 60 | 50 |    |
| 20 | 9.438 2768 | 738 | 9.455 2665 | 799   | 0.544 7335 | 9.983 0103 | 61 | 40 |    |
| 30 | 9.438 3506 | 738 | 9.455 3464 | 797   | 0.544 6536 | 9.983 0043 | 60 | 30 |    |
| 40 | 9.438 4244 | 738 | 9.455 4261 | 798   | 0.544 5739 | 9.982 9982 | 60 | 20 |    |
| 50 | 9.438 4982 | 737 | 9.455 5059 | 798   | 0.544 4941 | 9.982 9922 | 60 | 10 |    |
| 0  | 9.438 5719 | 738 | 9.455 5857 | 798   | 0.544 4143 | 9.982 9862 | 60 | 0  | 4  |
| 10 | 9.438 6457 | 737 | 9.455 6655 | 797   | 0.544 3345 | 9.982 9802 | 60 | 50 |    |
| 20 | 9.438 7194 | 737 | 9.455 7452 | 797   | 0.544 2548 | 9.982 9742 | 60 | 40 |    |
| 30 | 9.438 7931 | 737 | 9.455 8249 | 798   | 0.544 1751 | 9.982 9682 | 60 | 30 |    |
| 40 | 9.438 8668 | 737 | 9.455 9047 | 797   | 0.544 0953 | 9.982 9622 | 61 | 20 |    |
| 50 | 9.438 9405 | 737 | 9.455 9844 | 797   | 0.544 0156 | 9.982 9561 | 60 | 10 |    |
| 0  | 9.439 0142 | 737 | 9.456 0641 | 796   | 0.543 9359 | 9.982 9501 | 60 | 0  | 3  |
| 10 | 9.439 0879 | 736 | 9.456 1437 | 797   | 0.543 8563 | 9.982 9441 | 60 | 50 |    |
| 20 | 9.439 1615 | 736 | 9.456 2234 | 797   | 0.543 7766 | 9.982 9381 | 60 | 40 |    |
| 30 | 9.439 2351 | 737 | 9.456 3031 | 796   | 0.543 6969 | 9.982 9321 | 60 | 30 |    |
| 40 | 9.439 3088 | 736 | 9.456 3827 | 796   | 0.543 6173 | 9.982 9261 | 61 | 20 |    |
| 50 | 9.439 3824 | 736 | 9.456 4623 | 797   | 0.543 5377 | 9.982 9200 | 60 | 10 |    |
| 0  | 9.439 4560 | 736 | 9.456 5420 | 796   | 0.543 4580 | 9.982 9140 | 60 | 0  | 2  |
| 10 | 9.439 5296 | 735 | 9.456 6216 | 796   | 0.543 3784 | 9.982 9080 | 60 | 50 |    |
| 20 | 9.439 6031 | 736 | 9.456 7012 | 795   | 0.543 2988 | 9.982 9020 | 61 | 40 |    |
| 30 | 9.439 6767 | 735 | 9.456 7807 | 796   | 0.543 2193 | 9.982 8959 | 60 | 30 |    |
| 40 | 9.439 7502 | 735 | 9.456 8603 | 796   | 0.543 1397 | 9.982 8899 | 60 | 20 |    |
| 50 | 9.439 8237 | 736 | 9.456 9399 | 795   | 0.543 0601 | 9.982 8839 | 61 | 10 |    |
| 0  | 9.439 8973 | 735 | 9.457 0194 | 796   | 0.542 9806 | 9.982 8778 | 60 | 0  | 1  |
| 10 | 9.439 9708 | 735 | 9.457 0990 | 795   | 0.542 9010 | 9.982 8718 | 60 | 50 |    |
| 20 | 9.440 0443 | 734 | 9.457 1785 | 795   | 0.542 8215 | 9.982 8658 | 61 | 40 |    |
| 30 | 9.440 1177 | 735 | 9.457 2580 | 795   | 0.542 7420 | 9.982 8597 | 60 | 30 |    |
| 40 | 9.440 1912 | 735 | 9.457 3375 | 795   | 0.542 6625 | 9.982 8537 | 60 | 20 |    |
| 50 | 9.440 2646 | 734 | 9.457 4170 | 795   | 0.542 5830 | 9.982 8477 | 61 | 10 |    |
| 0  | 9.440 3381 | 735 | 9.457 4964 | 794   | 0.542 5036 | 9.982 8416 | 61 | 0  | 0  |
| "  | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d. | "  | '  |

789

1 79.9

2 159.8

3 239.7

4 319.6

5 399.5

6 479.4

7 559.3

8 639.2

9 719.1

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1 79.6

2 159.2

3 238.8

4 318.4

5 398.0

6 477.6

7 557.2

8 636.8

9 716.4

742

1 74.2

2 148.4

3 222.6

4 296.8

5 371.0

6 445.2

7 519.4

8 593.6

9 667.8

789

1 73.9

2 147.8

3 221.7

4 295.6

5 369.5

6 443.4

7 517.3

8 591.2

9 665.1

736

1 73.6

2 147.2

3 220.8

4 294.4

5 368.0

6 441.6

7 515.2

8 588.8

9 662.4

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1 6.0

2 12.0

3 18.0

4 24.0

5 30.0

6 36.0

7 42.0

8 48.0

9 54.0



793  
1 79.3  
2 158.6  
3 237.9  
4 317.2  
5 396.5  
6 475.8  
7 555.1  
8 634.4  
9 713.7

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1 79.0  
2 158.0  
3 237.0  
4 316.0  
5 395.0  
6 474.0  
7 553.0  
8 632.0  
9 711.0

787  
1 78.7  
2 157.4  
3 236.1  
4 314.8  
5 393.5  
6 472.2  
7 550.9  
8 629.6  
9 708.3

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1 78.3  
2 146.6  
3 219.9  
4 293.2  
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6 439.8  
7 513.1  
8 586.4  
9 659.7

729  
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2 145.8  
3 218.7  
4 291.6  
5 364.5  
6 437.4  
7 510.3  
8 583.2  
9 656.1

61  
1 6.1  
2 12.2  
3 18.3  
4 24.4  
5 30.5  
6 36.6  
7 42.7  
8 48.8  
9 54.9

|    | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d. | "  |    |
|----|----|------------|-----|------------|-------|------------|------------|----|----|----|
| 0  | 0  | 9.440 3381 | 734 | 9.457 4964 | 795   | 0.542 5036 | 9.982 8416 | 60 | 0  | 60 |
|    | 10 | 9.440 4115 | 734 | 9.457 5759 | 794   | 0.542 4241 | 9.982 8356 | 60 | 50 |    |
|    | 20 | 9.440 4849 | 734 | 9.457 6553 | 795   | 0.542 3447 | 9.982 8296 | 60 | 40 |    |
|    | 30 | 9.440 5583 | 734 | 9.457 7348 | 794   | 0.542 2652 | 9.982 8235 | 60 | 30 |    |
|    | 40 | 9.440 6317 | 733 | 9.457 8142 | 794   | 0.542 1858 | 9.982 8175 | 61 | 20 |    |
|    | 50 | 9.440 7050 | 734 | 9.457 8936 | 794   | 0.542 1064 | 9.982 8114 | 60 | 10 |    |
| 1  | 0  | 9.440 7784 | 733 | 9.457 9730 | 794   | 0.542 0270 | 9.982 8054 | 61 | 0  | 59 |
|    | 10 | 9.440 8517 | 734 | 9.458 0524 | 794   | 0.541 9476 | 9.982 7993 | 60 | 50 |    |
|    | 20 | 9.440 9251 | 733 | 9.458 1318 | 793   | 0.541 8682 | 9.982 7933 | 60 | 40 |    |
|    | 30 | 9.440 9984 | 733 | 9.458 2111 | 794   | 0.541 7889 | 9.982 7873 | 61 | 30 |    |
|    | 40 | 9.441 0717 | 733 | 9.458 2905 | 793   | 0.541 7095 | 9.982 7812 | 60 | 20 |    |
|    | 50 | 9.441 1450 | 732 | 9.458 3698 | 793   | 0.541 6302 | 9.982 7752 | 61 | 10 |    |
| 2  | 0  | 9.441 2182 | 733 | 9.458 4491 | 794   | 0.541 5509 | 9.982 7691 | 60 | 0  | 58 |
|    | 10 | 9.441 2915 | 733 | 9.458 5285 | 793   | 0.541 4715 | 9.982 7631 | 61 | 50 |    |
|    | 20 | 9.441 3648 | 732 | 9.458 6078 | 792   | 0.541 3922 | 9.982 7570 | 60 | 40 |    |
|    | 30 | 9.441 4380 | 732 | 9.458 6870 | 793   | 0.541 3130 | 9.982 7510 | 61 | 30 |    |
|    | 40 | 9.441 5112 | 732 | 9.458 7663 | 793   | 0.541 2337 | 9.982 7449 | 61 | 20 |    |
|    | 50 | 9.441 5844 | 732 | 9.458 8456 | 792   | 0.541 1544 | 9.982 7388 | 60 | 10 |    |
| 3  | 0  | 9.441 6576 | 732 | 9.458 9248 | 793   | 0.541 0752 | 9.982 7328 | 61 | 0  | 57 |
|    | 10 | 9.441 7308 | 732 | 9.459 0041 | 792   | 0.540 9959 | 9.982 7267 | 60 | 50 |    |
|    | 20 | 9.441 8040 | 731 | 9.459 0833 | 792   | 0.540 9167 | 9.982 7207 | 61 | 40 |    |
|    | 30 | 9.441 8771 | 732 | 9.459 1625 | 792   | 0.540 8375 | 9.982 7146 | 61 | 30 |    |
|    | 40 | 9.441 9503 | 731 | 9.459 2417 | 792   | 0.540 7583 | 9.982 7085 | 60 | 20 |    |
|    | 50 | 9.442 0234 | 731 | 9.459 3209 | 792   | 0.540 6791 | 9.982 7025 | 61 | 10 |    |
| 4  | 0  | 9.442 0965 | 731 | 9.459 4001 | 791   | 0.540 5999 | 9.982 6964 | 60 | 0  | 56 |
|    | 10 | 9.442 1696 | 731 | 9.459 4792 | 792   | 0.540 5208 | 9.982 6904 | 61 | 50 |    |
|    | 20 | 9.442 2427 | 731 | 9.459 5584 | 791   | 0.540 4416 | 9.982 6843 | 61 | 40 |    |
|    | 30 | 9.442 3158 | 730 | 9.459 6375 | 792   | 0.540 3625 | 9.982 6782 | 60 | 30 |    |
|    | 40 | 9.442 3888 | 731 | 9.459 7167 | 791   | 0.540 2833 | 9.982 6722 | 61 | 20 |    |
|    | 50 | 9.442 4619 | 730 | 9.459 7958 | 791   | 0.540 2042 | 9.982 6661 | 61 | 10 |    |
| 5  | 0  | 9.442 5349 | 730 | 9.459 8749 | 791   | 0.540 1251 | 9.982 6600 | 61 | 0  | 55 |
|    | 10 | 9.442 6079 | 730 | 9.459 9540 | 791   | 0.540 0460 | 9.982 6539 | 60 | 50 |    |
|    | 20 | 9.442 6809 | 730 | 9.460 0331 | 790   | 0.539 9669 | 9.982 6479 | 61 | 40 |    |
|    | 30 | 9.442 7539 | 730 | 9.460 1121 | 791   | 0.539 8879 | 9.982 6418 | 61 | 30 |    |
|    | 40 | 9.442 8269 | 730 | 9.460 1912 | 790   | 0.539 8088 | 9.982 6357 | 61 | 20 |    |
|    | 50 | 9.442 8999 | 729 | 9.460 2702 | 790   | 0.539 7298 | 9.982 6296 | 60 | 10 |    |
| 6  | 0  | 9.442 9728 | 730 | 9.460 3492 | 791   | 0.539 6508 | 9.982 6236 | 61 | 0  | 54 |
|    | 10 | 9.443 0458 | 729 | 9.460 4283 | 790   | 0.539 5717 | 9.982 6175 | 61 | 50 |    |
|    | 20 | 9.443 1187 | 729 | 9.460 5073 | 790   | 0.539 4927 | 9.982 6114 | 61 | 40 |    |
|    | 30 | 9.443 1916 | 729 | 9.460 5863 | 789   | 0.539 4137 | 9.982 6053 | 60 | 30 |    |
|    | 40 | 9.443 2645 | 729 | 9.460 6652 | 790   | 0.539 3348 | 9.982 5993 | 61 | 20 |    |
|    | 50 | 9.443 3374 | 729 | 9.460 7442 | 790   | 0.539 2558 | 9.982 5932 | 61 | 10 |    |
| 7  | 0  | 9.443 4103 | 728 | 9.460 8232 | 789   | 0.539 1768 | 9.982 5871 | 61 | 0  | 53 |
|    | 10 | 9.443 4831 | 729 | 9.460 9021 | 790   | 0.539 0979 | 9.982 5810 | 61 | 50 |    |
|    | 20 | 9.443 5560 | 728 | 9.460 9811 | 789   | 0.539 0189 | 9.982 5749 | 61 | 40 |    |
|    | 30 | 9.443 6288 | 728 | 9.461 0600 | 789   | 0.538 9400 | 9.982 5688 | 61 | 30 |    |
|    | 40 | 9.443 7016 | 728 | 9.461 1389 | 789   | 0.538 8611 | 9.982 5627 | 60 | 20 |    |
|    | 50 | 9.443 7744 | 728 | 9.461 2178 | 789   | 0.538 7822 | 9.982 5567 | 61 | 10 |    |
| 8  | 0  | 9.443 8472 | 728 | 9.461 2967 | 788   | 0.538 7033 | 9.982 5506 | 61 | 0  | 52 |
|    | 10 | 9.443 9200 | 728 | 9.461 3755 | 789   | 0.538 6245 | 9.982 5445 | 61 | 50 |    |
|    | 20 | 9.443 9928 | 727 | 9.461 4544 | 789   | 0.538 5456 | 9.982 5384 | 61 | 40 |    |
|    | 30 | 9.444 0655 | 728 | 9.461 5333 | 788   | 0.538 4667 | 9.982 5323 | 61 | 30 |    |
|    | 40 | 9.444 1383 | 727 | 9.461 6121 | 788   | 0.538 3879 | 9.982 5262 | 61 | 20 |    |
|    | 50 | 9.444 2110 | 727 | 9.461 6909 | 788   | 0.538 3091 | 9.982 5201 | 61 | 10 |    |
| 9  | 0  | 9.444 2837 | 727 | 9.461 7697 | 788   | 0.538 2303 | 9.982 5140 | 61 | 0  | 51 |
|    | 10 | 9.444 3564 | 727 | 9.461 8485 | 788   | 0.538 1515 | 9.982 5079 | 61 | 50 |    |
|    | 20 | 9.444 4291 | 727 | 9.461 9273 | 788   | 0.538 0727 | 9.982 5018 | 61 | 40 |    |
|    | 30 | 9.444 5018 | 727 | 9.462 0061 | 788   | 0.537 9939 | 9.982 4957 | 61 | 30 |    |
|    | 40 | 9.444 5745 | 726 | 9.462 0849 | 787   | 0.537 9151 | 9.982 4896 | 61 | 20 |    |
|    | 50 | 9.444 6471 | 726 | 9.462 1636 | 787   | 0.537 8364 | 9.982 4835 | 61 | 10 |    |
| 10 | 0  | 9.444 7197 | 726 | 9.462 2423 | 787   | 0.537 7577 | 9.982 4774 | 61 | 0  | 50 |
|    | "  | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d. | "  |    |



|    |    | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d. |    |    |
|----|----|------------|-----|------------|-------|------------|------------|----|----|----|
| 10 | o  | 9.444 7197 | 727 | 9.462 2423 | 788   | 0.537 7577 | 9.982 4774 | 61 | o  | 50 |
| 10 | 10 | 9.444 7924 | 726 | 9.462 3211 | 787   | 0.537 6789 | 9.982 4713 | 61 | 50 |    |
| 20 | 20 | 9.444 8650 | 726 | 9.462 3998 | 787   | 0.537 6002 | 9.982 4652 | 61 | 40 |    |
| 30 | 30 | 9.444 9376 | 726 | 9.462 4785 | 787   | 0.537 5215 | 9.982 4591 | 61 | 30 |    |
| 40 | 40 | 9.445 0102 | 725 | 9.462 5572 | 787   | 0.537 4428 | 9.982 4530 | 61 | 20 |    |
| 50 | 50 | 9.445 0827 | 726 | 9.462 6359 | 786   | 0.537 3641 | 9.982 4469 | 61 | 10 |    |
| 11 | o  | 9.445 1553 | 725 | 9.462 7145 | 787   | 0.537 2855 | 9.982 4408 | 62 | o  | 49 |
| 10 | 10 | 9.445 2278 | 726 | 9.462 7932 | 786   | 0.537 2068 | 9.982 4346 | 61 | 50 |    |
| 20 | 20 | 9.445 3004 | 725 | 9.462 8718 | 787   | 0.537 1282 | 9.982 4285 | 61 | 40 |    |
| 30 | 30 | 9.445 3729 | 725 | 9.462 9505 | 786   | 0.537 0495 | 9.982 4224 | 61 | 30 |    |
| 40 | 40 | 9.445 4454 | 725 | 9.463 0291 | 786   | 0.536 9709 | 9.982 4163 | 61 | 20 |    |
| 50 | 50 | 9.445 5179 | 725 | 9.463 1077 | 786   | 0.536 8923 | 9.982 4102 | 61 | 10 |    |
| 12 | o  | 9.445 5904 | 724 | 9.463 1863 | 786   | 0.536 8137 | 9.982 4041 | 61 | o  | 48 |
| 10 | 10 | 9.445 6628 | 725 | 9.463 2649 | 785   | 0.536 7351 | 9.982 3980 | 62 | 50 |    |
| 20 | 20 | 9.445 7353 | 724 | 9.463 3434 | 786   | 0.536 6566 | 9.982 3918 | 61 | 40 |    |
| 30 | 30 | 9.445 8077 | 724 | 9.463 4220 | 785   | 0.536 5780 | 9.982 3857 | 61 | 30 |    |
| 40 | 40 | 9.445 8801 | 725 | 9.463 5005 | 786   | 0.536 4995 | 9.982 3796 | 61 | 20 |    |
| 50 | 50 | 9.445 9526 | 724 | 9.463 5791 | 785   | 0.536 4209 | 9.982 3735 | 61 | 10 |    |
| 13 | o  | 9.446 0250 | 723 | 9.463 6576 | 785   | 0.536 3424 | 9.982 3674 | 62 | o  | 47 |
| 10 | 10 | 9.446 0973 | 724 | 9.463 7361 | 785   | 0.536 2639 | 9.982 3612 | 61 | 50 |    |
| 20 | 20 | 9.446 1697 | 724 | 9.463 8146 | 785   | 0.536 1854 | 9.982 3551 | 61 | 40 |    |
| 30 | 30 | 9.446 2421 | 723 | 9.463 8931 | 785   | 0.536 1069 | 9.982 3490 | 62 | 30 |    |
| 40 | 40 | 9.446 3144 | 724 | 9.463 9716 | 784   | 0.536 0284 | 9.982 3428 | 61 | 20 |    |
| 50 | 50 | 9.446 3868 | 723 | 9.464 0500 | 785   | 0.535 9500 | 9.982 3367 | 61 | 10 |    |
| 14 | o  | 9.446 4591 | 723 | 9.464 1285 | 784   | 0.535 8715 | 9.982 3306 | 61 | o  | 46 |
| 10 | 10 | 9.446 5314 | 723 | 9.464 2069 | 785   | 0.535 7931 | 9.982 3245 | 62 | 50 |    |
| 20 | 20 | 9.446 6037 | 723 | 9.464 2854 | 784   | 0.535 7146 | 9.982 3183 | 61 | 40 |    |
| 30 | 30 | 9.446 6760 | 722 | 9.464 3638 | 784   | 0.535 6362 | 9.982 3122 | 61 | 30 |    |
| 40 | 40 | 9.446 7482 | 723 | 9.464 4422 | 784   | 0.535 5578 | 9.982 3061 | 62 | 20 |    |
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| 15 | o  | 9.446 8927 | 723 | 9.464 5990 | 783   | 0.535 4010 | 9.982 2938 | 62 | o  | 45 |
| 10 | 10 | 9.446 9650 | 722 | 9.464 6773 | 784   | 0.535 3227 | 9.982 2876 | 61 | 50 |    |
| 20 | 20 | 9.447 0372 | 722 | 9.464 7557 | 783   | 0.535 2443 | 9.982 2815 | 61 | 40 |    |
| 30 | 30 | 9.447 1094 | 722 | 9.464 8340 | 784   | 0.535 1660 | 9.982 2754 | 62 | 30 |    |
| 40 | 40 | 9.447 1816 | 722 | 9.464 9124 | 783   | 0.535 0876 | 9.982 2692 | 62 | 20 |    |
| 50 | 50 | 9.447 2538 | 721 | 9.464 9907 | 783   | 0.535 0093 | 9.982 2631 | 61 | 10 |    |
| 16 | o  | 9.447 3259 | 722 | 9.465 0690 | 783   | 0.534 9310 | 9.982 2569 | 61 | o  | 44 |
| 10 | 10 | 9.447 3981 | 721 | 9.465 1473 | 783   | 0.534 8527 | 9.982 2508 | 61 | 50 |    |
| 20 | 20 | 9.447 4702 | 721 | 9.465 2256 | 782   | 0.534 7744 | 9.982 2447 | 62 | 40 |    |
| 30 | 30 | 9.447 5423 | 722 | 9.465 3038 | 783   | 0.534 6962 | 9.982 2385 | 61 | 30 |    |
| 40 | 40 | 9.447 6145 | 721 | 9.465 3821 | 783   | 0.534 6179 | 9.982 2324 | 62 | 20 |    |
| 50 | 50 | 9.447 6866 | 720 | 9.465 4604 | 782   | 0.534 5396 | 9.982 2262 | 61 | 10 |    |
| 17 | o  | 9.447 7586 | 721 | 9.465 5386 | 782   | 0.534 4614 | 9.982 2201 | 62 | o  | 43 |
| 10 | 10 | 9.447 8307 | 721 | 9.465 6168 | 782   | 0.534 3832 | 9.982 2139 | 61 | 50 |    |
| 20 | 20 | 9.447 9028 | 720 | 9.465 6950 | 782   | 0.534 3050 | 9.982 2078 | 62 | 40 |    |
| 30 | 30 | 9.447 9748 | 721 | 9.465 7732 | 782   | 0.534 2268 | 9.982 2016 | 61 | 30 |    |
| 40 | 40 | 9.448 0469 | 720 | 9.465 8514 | 782   | 0.534 1486 | 9.982 1955 | 62 | 20 |    |
| 50 | 50 | 9.448 1189 | 720 | 9.465 9296 | 782   | 0.534 0704 | 9.982 1893 | 62 | 10 |    |
| 18 | o  | 9.448 1909 | 720 | 9.466 0078 | 781   | 0.533 9922 | 9.982 1831 | 61 | o  | 42 |
| 10 | 10 | 9.448 2629 | 720 | 9.466 0859 | 782   | 0.533 9141 | 9.982 1770 | 62 | 50 |    |
| 20 | 20 | 9.448 3349 | 720 | 9.466 1641 | 781   | 0.533 8359 | 9.982 1708 | 61 | 40 |    |
| 30 | 30 | 9.448 4069 | 719 | 9.466 2422 | 781   | 0.533 7578 | 9.982 1647 | 62 | 30 |    |
| 40 | 40 | 9.448 4788 | 720 | 9.466 3203 | 781   | 0.533 6797 | 9.982 1585 | 62 | 20 |    |
| 50 | 50 | 9.448 5508 | 719 | 9.466 3984 | 781   | 0.533 6016 | 9.982 1523 | 61 | 10 |    |
| 19 | o  | 9.448 6227 | 719 | 9.466 4765 | 781   | 0.533 5235 | 9.982 1462 | 62 | o  | 41 |
| 10 | 10 | 9.448 6946 | 719 | 9.466 5546 | 781   | 0.533 4454 | 9.982 1400 | 62 | 50 |    |
| 20 | 20 | 9.448 7665 | 719 | 9.466 6327 | 780   | 0.533 3673 | 9.982 1338 | 61 | 40 |    |
| 30 | 30 | 9.448 8384 | 719 | 9.466 7107 | 781   | 0.533 2893 | 9.982 1277 | 62 | 30 |    |
| 40 | 40 | 9.448 9103 | 719 | 9.466 7888 | 780   | 0.533 2112 | 9.982 1215 | 62 | 20 |    |
| 50 | 50 | 9.448 9822 | 718 | 9.466 8668 | 780   | 0.533 1332 | 9.982 1153 | 61 | 10 |    |
| 20 | o  | 9.449 0540 |     | 9.466 9448 |       | 0.533 0552 | 9.982 1092 |    | o  | 40 |

784  
1 78.4  
2 156.8  
3 235.2  
4 313.6  
5 392.0  
6 470.4  
7 548.8  
8 627.2  
9 705.6

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1 78.1  
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3 234.3  
4 312.4  
5 390.5  
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7 546.7  
8 624.8  
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7 503.3  
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2 12.4  
3 18.6  
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5 31.0  
6 37.2  
7 43.4  
8 49.6  
9 55.8



|         |    | sin         | d.  | Tang       | d. c. | Cotg       | Coa        | d. |    |    |
|---------|----|-------------|-----|------------|-------|------------|------------|----|----|----|
|         | 20 | 0 9449 0540 | 718 | 9 466 9148 | 720   | 0 544 0552 | 9 982 1092 | 62 | 0  | 40 |
| 770     | 10 | 9 449 1358  | 719 | 9 467 0228 | 720   | 0 544 9772 | 9 982 1090 | 62 | 50 |    |
| 1 77.9  | 20 | 9 449 1977  | 720 | 9 467 1008 | 720   | 0 545 5002 | 9 982 0968 | 62 | 40 |    |
| 2 155.5 | 30 | 9 449 2095  | 718 | 9 467 1288 | 720   | 0 545 8222 | 9 982 0968 | 62 | 30 |    |
| 3 331.7 | 40 | 9 449 1413  | 718 | 9 467 2568 | 720   | 0 545 7442 | 9 982 0844 | 62 | 20 |    |
| 4 518.6 | 50 | 9 449 1431  | 718 | 9 467 3348 | 720   | 0 545 6662 | 9 982 0720 | 62 | 10 |    |
| 5 709.5 |    |             |     |            |       |            |            |    |    |    |
| 6 899.4 | 21 | 0 9449 1849 | 717 | 9 467 4127 | 720   | 0 545 5882 | 9 982 0596 | 62 | 0  | 30 |
| 7 105.3 | 10 | 9 449 1566  | 718 | 9 467 4907 | 720   | 0 545 5102 | 9 982 0596 | 62 | 50 |    |
| 8 314.8 | 20 | 9 449 1624  | 717 | 9 467 5686 | 720   | 0 545 4322 | 9 982 0596 | 62 | 40 |    |
| 9 709.1 | 30 | 9 449 1601  | 717 | 9 467 6466 | 720   | 0 545 3542 | 9 982 0596 | 62 | 30 |    |
|         | 40 | 9 449 1728  | 718 | 9 467 7246 | 720   | 0 545 2762 | 9 982 0596 | 62 | 20 |    |
|         | 50 | 9 449 1846  | 717 | 9 467 8026 | 720   | 0 545 1982 | 9 982 0596 | 62 | 10 |    |
| 776     | 22 | 0 9449 0183 | 716 | 9 467 8806 | 720   | 0 545 1202 | 9 982 0596 | 62 | 0  | 38 |
| 1 77.6  | 10 | 9 449 0869  | 717 | 9 467 9586 | 720   | 0 545 0422 | 9 982 0596 | 62 | 50 |    |
| 2 155.1 | 20 | 9 449 0586  | 717 | 9 468 0366 | 720   | 0 544 9642 | 9 982 0596 | 62 | 40 |    |
| 3 331.8 | 30 | 9 449 0304  | 716 | 9 468 1146 | 720   | 0 544 8862 | 9 982 0596 | 62 | 30 |    |
| 4 518.4 | 40 | 9 449 0021  | 717 | 9 468 1926 | 720   | 0 544 8082 | 9 982 0596 | 62 | 20 |    |
| 5 709.6 | 50 | 9 449 0000  | 716 | 9 468 2706 | 720   | 0 544 7302 | 9 982 0596 | 62 | 10 |    |
| 6 899.3 |    |             |     |            |       |            |            |    |    |    |
| 7 105.4 | 23 | 0 9449 1453 | 716 | 9 468 3486 | 720   | 0 544 6522 | 9 982 0596 | 62 | 0  | 47 |
| 8 314.3 | 10 | 9 449 1168  | 716 | 9 468 4266 | 720   | 0 544 5742 | 9 982 0596 | 62 | 50 |    |
| 9 709.3 | 20 | 9 449 1084  | 716 | 9 468 5046 | 720   | 0 544 4962 | 9 982 0596 | 62 | 40 |    |
|         | 30 | 9 449 1001  | 715 | 9 468 5826 | 720   | 0 544 4182 | 9 982 0596 | 62 | 30 |    |
| 773     | 40 | 9 449 0615  | 716 | 9 468 6606 | 720   | 0 544 3402 | 9 982 0596 | 62 | 20 |    |
| 1 77.3  | 50 | 9 449 0000  | 716 | 9 468 7386 | 720   | 0 544 2622 | 9 982 0596 | 62 | 10 |    |
| 2 154.6 |    |             |     |            |       |            |            |    |    |    |
| 3 331.9 | 24 | 0 9449 2747 | 715 | 9 468 8166 | 720   | 0 544 1842 | 9 982 0596 | 62 | 0  | 56 |
| 4 518.9 | 10 | 9 449 0862  | 715 | 9 468 8946 | 720   | 0 544 1062 | 9 982 0596 | 62 | 50 |    |
| 5 709.8 | 20 | 9 449 0977  | 715 | 9 468 9726 | 720   | 0 544 0282 | 9 982 0596 | 62 | 40 |    |
| 6 899.8 | 30 | 9 449 0992  | 715 | 9 469 0506 | 720   | 0 543 9502 | 9 982 0596 | 62 | 30 |    |
| 7 105.1 | 40 | 9 449 0607  | 715 | 9 469 1286 | 720   | 0 543 8722 | 9 982 0596 | 62 | 20 |    |
| 8 314.9 | 50 | 9 449 1432  | 715 | 9 469 2066 | 720   | 0 543 7942 | 9 982 0596 | 62 | 10 |    |
| 9 709.9 |    |             |     |            |       |            |            |    |    |    |
| 777     | 25 | 0 9449 2017 | 714 | 9 469 2846 | 720   | 0 543 7162 | 9 982 0596 | 62 | 0  | 65 |
| 1 77.7  | 10 | 9 449 1251  | 715 | 9 469 3626 | 720   | 0 543 6382 | 9 982 0596 | 62 | 50 |    |
| 2 154.4 | 20 | 9 449 1366  | 714 | 9 469 4406 | 720   | 0 543 5602 | 9 982 0596 | 62 | 40 |    |
| 3 331.4 | 30 | 9 449 1480  | 714 | 9 469 5186 | 720   | 0 543 4822 | 9 982 0596 | 62 | 30 |    |
| 4 518.8 | 40 | 9 449 1493  | 714 | 9 469 5966 | 720   | 0 543 4042 | 9 982 0596 | 62 | 20 |    |
| 5 709.5 | 50 | 9 449 1008  | 714 | 9 469 6746 | 720   | 0 543 3262 | 9 982 0596 | 62 | 10 |    |
| 6 899.5 |    |             |     |            |       |            |            |    |    |    |
| 7 105.2 | 26 | 0 9449 0332 | 714 | 9 469 7526 | 720   | 0 543 2482 | 9 982 0596 | 62 | 0  | 74 |
| 8 314.2 | 10 | 9 449 1046  | 714 | 9 469 8306 | 720   | 0 543 1702 | 9 982 0596 | 62 | 50 |    |
| 9 709.2 | 20 | 9 449 1749  | 714 | 9 469 9086 | 720   | 0 543 0922 | 9 982 0596 | 62 | 40 |    |
|         | 30 | 9 449 1861  | 714 | 9 469 9866 | 720   | 0 543 0142 | 9 982 0596 | 62 | 30 |    |
|         | 40 | 9 449 1976  | 714 | 9 470 0646 | 720   | 0 542 9362 | 9 982 0596 | 62 | 20 |    |
|         | 50 | 9 449 1990  | 714 | 9 470 1426 | 720   | 0 542 8582 | 9 982 0596 | 62 | 10 |    |
| 778     | 27 | 0 9449 0001 | 713 | 9 470 2206 | 720   | 0 542 7802 | 9 982 0596 | 62 | 0  | 83 |
| 1 77.8  | 10 | 9 449 1116  | 713 | 9 470 2986 | 720   | 0 542 7022 | 9 982 0596 | 62 | 50 |    |
| 2 154.6 | 20 | 9 449 1029  | 713 | 9 470 3766 | 720   | 0 542 6242 | 9 982 0596 | 62 | 40 |    |
| 3 331.9 | 30 | 9 449 1042  | 713 | 9 470 4546 | 720   | 0 542 5462 | 9 982 0596 | 62 | 30 |    |
| 4 518.3 | 40 | 9 449 1054  | 713 | 9 470 5326 | 720   | 0 542 4682 | 9 982 0596 | 62 | 20 |    |
| 5 709.8 | 50 | 9 449 1067  | 713 | 9 470 6106 | 720   | 0 542 3902 | 9 982 0596 | 62 | 10 |    |
| 6 899.3 |    |             |     |            |       |            |            |    |    |    |
| 7 105.4 | 28 | 0 9449 0879 | 713 | 9 470 6886 | 720   | 0 542 3122 | 9 982 0596 | 62 | 0  | 92 |
| 8 314.7 | 10 | 9 449 1591  | 713 | 9 470 7666 | 720   | 0 542 2342 | 9 982 0596 | 62 | 50 |    |
|         | 20 | 9 449 1604  | 713 | 9 470 8446 | 720   | 0 542 1562 | 9 982 0596 | 62 | 40 |    |
|         | 30 | 9 449 1616  | 713 | 9 470 9226 | 720   | 0 542 0782 | 9 982 0596 | 62 | 30 |    |
|         | 40 | 9 449 1728  | 713 | 9 470 9996 | 720   | 0 542 0002 | 9 982 0596 | 62 | 20 |    |
|         | 50 | 9 449 1842  | 713 | 9 471 0776 | 720   | 0 541 9222 | 9 982 0596 | 62 | 10 |    |
| 63      |    |             |     |            |       |            |            |    |    |    |
| 1 6.3   | 29 | 0 9449 0351 | 713 | 9 471 1556 | 720   | 0 541 8442 | 9 982 0596 | 62 | 0  | 31 |
| 2 15.4  | 10 | 9 449 0862  | 713 | 9 471 2336 | 720   | 0 541 7662 | 9 982 0596 | 62 | 50 |    |
| 3 31.8  | 20 | 9 449 0574  | 713 | 9 471 3116 | 720   | 0 541 6882 | 9 982 0596 | 62 | 40 |    |
| 4 48.3  | 30 | 9 449 1288  | 713 | 9 471 3896 | 720   | 0 541 6102 | 9 982 0596 | 62 | 30 |    |
| 5 65.0  | 40 | 9 449 1996  | 713 | 9 471 4676 | 720   | 0 541 5322 | 9 982 0596 | 62 | 20 |    |
| 6 81.6  | 50 | 9 449 2707  | 713 | 9 471 5456 | 720   | 0 541 4542 | 9 982 0596 | 62 | 10 |    |
| 7 98.6  |    |             |     |            |       |            |            |    |    |    |
| 8 153.8 | 30 | 0 9449 3418 | 712 | 9 471 6236 | 720   | 0 541 3762 | 9 982 0596 | 62 | 0  | 20 |
|         |    |             |     |            |       |            |            |    |    |    |
|         |    | Coa         | d.  | Cotg       | d. c. | Tang       | Sin        | d. |    |    |



| i  | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d. | "  | i  |
|----|----|------------|-----|------------|-------|------------|------------|----|----|----|
| 30 | o  | 9.453 3418 | 711 | 9.471 6048 | 774   | 0.528 3952 | 9.981 7370 | 63 | o  | 30 |
|    | 10 | 9.453 4129 | 710 | 9.471 6822 | 773   | 0.528 3178 | 9.981 7307 | 62 | 50 |    |
|    | 20 | 9.453 4839 | 711 | 9.471 7595 | 772   | 0.528 2405 | 9.981 7245 | 63 | 40 |    |
|    | 30 | 9.453 5550 | 710 | 9.471 8367 | 773   | 0.528 1633 | 9.981 7182 | 62 | 30 |    |
|    | 40 | 9.453 6260 | 711 | 9.471 9140 | 772   | 0.528 0860 | 9.981 7120 | 62 | 20 |    |
|    | 50 | 9.453 6971 | 710 | 9.471 9913 | 773   | 0.528 0087 | 9.981 7058 | 63 | 10 |    |
| 31 | o  | 9.453 7681 | 710 | 9.472 0685 | 772   | 0.527 9315 | 9.981 6995 | 62 | o  | 29 |
|    | 10 | 9.453 8391 | 709 | 9.472 1458 | 772   | 0.527 8542 | 9.981 6933 | 63 | 50 |    |
|    | 20 | 9.453 9100 | 710 | 9.472 2230 | 772   | 0.527 7770 | 9.981 6870 | 62 | 40 |    |
|    | 30 | 9.453 9810 | 710 | 9.472 3002 | 772   | 0.527 6998 | 9.981 6808 | 63 | 30 |    |
|    | 40 | 9.454 0520 | 709 | 9.472 3774 | 772   | 0.527 6226 | 9.981 6745 | 62 | 20 |    |
|    | 50 | 9.454 1229 | 710 | 9.472 4546 | 772   | 0.527 5454 | 9.981 6683 | 63 | 10 |    |
| 32 | o  | 9.454 1939 | 709 | 9.472 5318 | 772   | 0.527 4682 | 9.981 6620 | 62 | o  | 28 |
|    | 10 | 9.454 2648 | 709 | 9.472 6090 | 772   | 0.527 3910 | 9.981 6558 | 63 | 50 |    |
|    | 20 | 9.454 3357 | 709 | 9.472 6862 | 772   | 0.527 3138 | 9.981 6495 | 62 | 40 |    |
|    | 30 | 9.454 4066 | 709 | 9.472 7633 | 771   | 0.527 2367 | 9.981 6433 | 63 | 30 |    |
|    | 40 | 9.454 4775 | 708 | 9.472 8405 | 771   | 0.527 1595 | 9.981 6370 | 62 | 20 |    |
|    | 50 | 9.454 5484 | 709 | 9.472 9176 | 771   | 0.527 0824 | 9.981 6308 | 63 | 10 |    |
| 33 | o  | 9.454 6192 | 709 | 9.472 9947 | 771   | 0.527 0053 | 9.981 6245 | 62 | o  | 27 |
|    | 10 | 9.454 6901 | 708 | 9.473 0718 | 771   | 0.526 9282 | 9.981 6183 | 63 | 50 |    |
|    | 20 | 9.454 7609 | 708 | 9.473 1489 | 771   | 0.526 8511 | 9.981 6120 | 63 | 40 |    |
|    | 30 | 9.454 8317 | 708 | 9.473 2260 | 771   | 0.526 7740 | 9.981 6057 | 62 | 30 |    |
|    | 40 | 9.454 9025 | 708 | 9.473 3030 | 771   | 0.526 6970 | 9.981 5995 | 63 | 20 |    |
|    | 50 | 9.454 9733 | 708 | 9.473 3801 | 771   | 0.526 6199 | 9.981 5932 | 62 | 10 |    |
| 34 | o  | 9.455 0441 | 708 | 9.473 4572 | 770   | 0.526 5428 | 9.981 5870 | 63 | o  | 26 |
|    | 10 | 9.455 1149 | 707 | 9.473 5342 | 770   | 0.526 4658 | 9.981 5807 | 63 | 50 |    |
|    | 20 | 9.455 1856 | 708 | 9.473 6112 | 770   | 0.526 3888 | 9.981 5744 | 62 | 40 |    |
|    | 30 | 9.455 2564 | 707 | 9.473 6882 | 770   | 0.526 3118 | 9.981 5682 | 63 | 30 |    |
|    | 40 | 9.455 3271 | 708 | 9.473 7652 | 770   | 0.526 2348 | 9.981 5619 | 63 | 20 |    |
|    | 50 | 9.455 3979 | 707 | 9.473 8422 | 770   | 0.526 1578 | 9.981 5556 | 62 | 10 |    |
| 35 | o  | 9.455 4686 | 707 | 9.473 9192 | 770   | 0.526 0808 | 9.981 5494 | 63 | o  | 25 |
|    | 10 | 9.455 5393 | 706 | 9.473 9962 | 769   | 0.526 0038 | 9.981 5431 | 63 | 50 |    |
|    | 20 | 9.455 6099 | 707 | 9.474 0731 | 770   | 0.525 9269 | 9.981 5368 | 63 | 40 |    |
|    | 30 | 9.455 6806 | 707 | 9.474 1501 | 769   | 0.525 8499 | 9.981 5305 | 62 | 30 |    |
|    | 40 | 9.455 7513 | 706 | 9.474 2270 | 769   | 0.525 7730 | 9.981 5243 | 63 | 20 |    |
|    | 50 | 9.455 8219 | 707 | 9.474 3039 | 769   | 0.525 6961 | 9.981 5180 | 63 | 10 |    |
| 36 | o  | 9.455 8926 | 706 | 9.474 3808 | 769   | 0.525 6192 | 9.981 5117 | 63 | o  | 24 |
|    | 10 | 9.455 9632 | 706 | 9.474 4577 | 769   | 0.525 5423 | 9.981 5054 | 62 | 50 |    |
|    | 20 | 9.456 0338 | 706 | 9.474 5346 | 769   | 0.525 4654 | 9.981 4992 | 63 | 40 |    |
|    | 30 | 9.456 1044 | 706 | 9.474 6115 | 769   | 0.525 3885 | 9.981 4929 | 63 | 30 |    |
|    | 40 | 9.456 1750 | 705 | 9.474 6884 | 768   | 0.525 3116 | 9.981 4866 | 63 | 20 |    |
|    | 50 | 9.456 2455 | 706 | 9.474 7652 | 769   | 0.525 2348 | 9.981 4803 | 63 | 10 |    |
| 37 | o  | 9.456 3161 | 705 | 9.474 8421 | 768   | 0.525 1579 | 9.981 4740 | 62 | o  | 23 |
|    | 10 | 9.456 3866 | 706 | 9.474 9189 | 768   | 0.525 0811 | 9.981 4678 | 63 | 50 |    |
|    | 20 | 9.456 4572 | 705 | 9.474 9957 | 768   | 0.525 0043 | 9.981 4615 | 63 | 40 |    |
|    | 30 | 9.456 5277 | 705 | 9.475 0725 | 768   | 0.524 9275 | 9.981 4552 | 63 | 30 |    |
|    | 40 | 9.456 5982 | 705 | 9.475 1493 | 768   | 0.524 8507 | 9.981 4489 | 63 | 20 |    |
|    | 50 | 9.456 6687 | 705 | 9.475 2261 | 768   | 0.524 7739 | 9.981 4426 | 63 | 10 |    |
| 38 | o  | 9.456 7392 | 705 | 9.475 3029 | 767   | 0.524 6971 | 9.981 4363 | 63 | o  | 22 |
|    | 10 | 9.456 8097 | 704 | 9.475 3796 | 768   | 0.524 6204 | 9.981 4300 | 63 | 50 |    |
|    | 20 | 9.456 8801 | 705 | 9.475 4564 | 767   | 0.524 5436 | 9.981 4237 | 63 | 40 |    |
|    | 30 | 9.456 9506 | 704 | 9.475 5331 | 768   | 0.524 4669 | 9.981 4174 | 63 | 30 |    |
|    | 40 | 9.457 0210 | 704 | 9.475 6099 | 767   | 0.524 3901 | 9.981 4111 | 62 | 20 |    |
|    | 50 | 9.457 0914 | 704 | 9.475 6866 | 767   | 0.524 3134 | 9.981 4049 | 63 | 10 |    |
| 39 | o  | 9.457 1618 | 704 | 9.475 7633 | 767   | 0.524 2367 | 9.981 3986 | 63 | o  | 21 |
|    | 10 | 9.457 2322 | 704 | 9.475 8400 | 767   | 0.524 1600 | 9.981 3923 | 63 | 50 |    |
|    | 20 | 9.457 3026 | 704 | 9.475 9167 | 766   | 0.524 0833 | 9.981 3860 | 63 | 40 |    |
|    | 30 | 9.457 3730 | 704 | 9.475 9933 | 767   | 0.524 0067 | 9.981 3797 | 63 | 30 |    |
|    | 40 | 9.457 4434 | 703 | 9.476 0700 | 766   | 0.523 9300 | 9.981 3734 | 63 | 20 |    |
|    | 50 | 9.457 5137 | 703 | 9.476 1466 | 767   | 0.523 8534 | 9.981 3671 | 63 | 10 |    |
| 40 | o  | 9.457 5840 | 703 | 9.476 2233 | 767   | 0.523 7767 | 9.981 3608 | 63 | o  | 20 |
| i  | "  | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d. | "  | i  |

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|    | n  | Sin        | d.  | Tang       | d. c. | Cotg       | Co         | d.  | n  |    |
|----|----|------------|-----|------------|-------|------------|------------|-----|----|----|
| 0  | 0  | 9.465 9353 | 689 | 9.485 3199 | 753   | 0.534 6665 | 9.980 5964 | 64  | 0  | 60 |
|    | 10 | 9.466 1542 | 689 | 9.485 3244 | 753   | 0.534 3387 | 9.980 5869 | 65  | 50 |    |
|    | 20 | 9.466 2741 | 688 | 9.485 3286 | 753   | 0.534 0115 | 9.980 5773 | 66  | 40 |    |
|    | 30 | 9.466 3940 | 688 | 9.485 3329 | 753   | 0.533 6843 | 9.980 5678 | 67  | 30 |    |
|    | 40 | 9.466 5139 | 688 | 9.485 3371 | 753   | 0.533 3571 | 9.980 5583 | 68  | 20 |    |
| 1  | 0  | 9.466 6338 | 688 | 9.485 3413 | 753   | 0.533 0300 | 9.980 5488 | 69  | 10 |    |
|    | 10 | 9.466 7537 | 688 | 9.485 3455 | 753   | 0.532 7028 | 9.980 5393 | 70  | 0  | 59 |
|    | 20 | 9.466 8736 | 688 | 9.485 3497 | 753   | 0.532 3757 | 9.980 5298 | 71  | 50 |    |
|    | 30 | 9.466 9935 | 687 | 9.485 3539 | 753   | 0.532 0485 | 9.980 5203 | 72  | 40 |    |
|    | 40 | 9.466 6134 | 687 | 9.485 3581 | 753   | 0.531 7214 | 9.980 5108 | 73  | 30 |    |
| 2  | 0  | 9.466 7333 | 687 | 9.485 3623 | 753   | 0.531 3942 | 9.980 5013 | 74  | 20 |    |
|    | 10 | 9.466 8532 | 687 | 9.485 3665 | 753   | 0.531 0671 | 9.980 4918 | 75  | 10 |    |
|    | 20 | 9.466 9731 | 687 | 9.485 3707 | 753   | 0.530 7400 | 9.980 4823 | 76  | 0  | 58 |
|    | 30 | 9.466 6130 | 687 | 9.485 3749 | 753   | 0.530 4129 | 9.980 4728 | 77  | 50 |    |
|    | 40 | 9.466 7329 | 687 | 9.485 3791 | 753   | 0.530 0858 | 9.980 4633 | 78  | 40 |    |
| 3  | 0  | 9.466 8528 | 687 | 9.485 3833 | 753   | 0.529 7587 | 9.980 4538 | 79  | 30 |    |
|    | 10 | 9.466 9727 | 686 | 9.485 3875 | 753   | 0.529 4316 | 9.980 4443 | 80  | 20 |    |
|    | 20 | 9.466 6126 | 686 | 9.485 3917 | 753   | 0.529 1045 | 9.980 4348 | 81  | 10 |    |
|    | 30 | 9.466 7325 | 686 | 9.485 3959 | 753   | 0.528 7774 | 9.980 4253 | 82  | 0  | 57 |
|    | 40 | 9.466 8524 | 686 | 9.485 4001 | 753   | 0.528 4503 | 9.980 4158 | 83  | 50 |    |
| 4  | 0  | 9.466 9723 | 686 | 9.485 4043 | 753   | 0.528 1232 | 9.980 4063 | 84  | 40 |    |
|    | 10 | 9.466 6122 | 686 | 9.485 4085 | 753   | 0.527 7961 | 9.980 3968 | 85  | 30 |    |
|    | 20 | 9.466 7321 | 685 | 9.485 4127 | 753   | 0.527 4690 | 9.980 3873 | 86  | 20 |    |
|    | 30 | 9.466 8520 | 685 | 9.485 4169 | 753   | 0.527 1419 | 9.980 3778 | 87  | 10 |    |
|    | 40 | 9.466 9719 | 685 | 9.485 4211 | 753   | 0.526 8148 | 9.980 3683 | 88  | 0  | 56 |
| 5  | 0  | 9.466 9918 | 685 | 9.485 4253 | 753   | 0.526 4877 | 9.980 3588 | 89  | 50 |    |
|    | 10 | 9.466 6117 | 685 | 9.485 4295 | 753   | 0.526 1606 | 9.980 3493 | 90  | 40 |    |
|    | 20 | 9.466 7316 | 685 | 9.485 4337 | 753   | 0.525 8335 | 9.980 3398 | 91  | 30 |    |
|    | 30 | 9.466 8515 | 684 | 9.485 4379 | 753   | 0.525 5064 | 9.980 3303 | 92  | 20 |    |
|    | 40 | 9.466 9714 | 684 | 9.485 4421 | 753   | 0.525 1793 | 9.980 3208 | 93  | 10 |    |
| 6  | 0  | 9.466 6113 | 684 | 9.485 4463 | 753   | 0.524 8522 | 9.980 3113 | 94  | 0  | 55 |
|    | 10 | 9.466 7312 | 684 | 9.485 4505 | 753   | 0.524 5251 | 9.980 3018 | 95  | 50 |    |
|    | 20 | 9.466 8511 | 684 | 9.485 4547 | 753   | 0.524 1980 | 9.980 2923 | 96  | 40 |    |
|    | 30 | 9.466 9710 | 684 | 9.485 4589 | 753   | 0.523 8709 | 9.980 2828 | 97  | 30 |    |
|    | 40 | 9.466 6109 | 684 | 9.485 4631 | 753   | 0.523 5438 | 9.980 2733 | 98  | 20 |    |
| 7  | 0  | 9.466 7308 | 684 | 9.485 4673 | 753   | 0.523 2167 | 9.980 2638 | 99  | 10 |    |
|    | 10 | 9.466 8507 | 683 | 9.485 4715 | 753   | 0.522 8896 | 9.980 2543 | 100 | 0  | 54 |
|    | 20 | 9.466 9706 | 683 | 9.485 4757 | 753   | 0.522 5625 | 9.980 2448 | 101 | 50 |    |
|    | 30 | 9.466 6105 | 683 | 9.485 4799 | 753   | 0.522 2354 | 9.980 2353 | 102 | 40 |    |
|    | 40 | 9.466 7304 | 683 | 9.485 4841 | 753   | 0.521 9083 | 9.980 2258 | 103 | 30 |    |
| 8  | 0  | 9.466 8503 | 683 | 9.485 4883 | 753   | 0.521 5812 | 9.980 2163 | 104 | 20 |    |
|    | 10 | 9.466 9702 | 683 | 9.485 4925 | 753   | 0.521 2541 | 9.980 2068 | 105 | 10 |    |
|    | 20 | 9.466 6101 | 683 | 9.485 4967 | 753   | 0.520 9270 | 9.980 1973 | 106 | 0  | 53 |
|    | 30 | 9.466 7300 | 683 | 9.485 5009 | 753   | 0.520 6000 | 9.980 1878 | 107 | 50 |    |
|    | 40 | 9.466 8499 | 683 | 9.485 5051 | 753   | 0.520 2729 | 9.980 1783 | 108 | 40 |    |
| 9  | 0  | 9.466 9698 | 683 | 9.485 5093 | 753   | 0.519 9458 | 9.980 1688 | 109 | 30 |    |
|    | 10 | 9.466 6097 | 683 | 9.485 5135 | 753   | 0.519 6187 | 9.980 1593 | 110 | 20 |    |
|    | 20 | 9.466 7296 | 683 | 9.485 5177 | 753   | 0.519 2916 | 9.980 1498 | 111 | 10 |    |
|    | 30 | 9.466 8495 | 682 | 9.485 5219 | 753   | 0.518 9645 | 9.980 1403 | 112 | 0  | 52 |
|    | 40 | 9.466 9694 | 682 | 9.485 5261 | 753   | 0.518 6374 | 9.980 1308 | 113 | 50 |    |
| 10 | 0  | 9.466 6093 | 682 | 9.485 5303 | 753   | 0.518 3103 | 9.980 1213 | 114 | 40 |    |
|    | 10 | 9.466 7292 | 682 | 9.485 5345 | 753   | 0.517 9832 | 9.980 1118 | 115 | 30 |    |
|    | 20 | 9.466 8491 | 682 | 9.485 5387 | 753   | 0.517 6561 | 9.980 1023 | 116 | 20 |    |
|    | 30 | 9.466 9690 | 682 | 9.485 5429 | 753   | 0.517 3290 | 9.980 928  | 117 | 10 |    |
|    | 40 | 9.466 6089 | 682 | 9.485 5471 | 753   | 0.516 9999 | 9.980 833  | 118 | 0  | 51 |
| 10 | 0  | 9.466 7288 | 682 | 9.485 5513 | 753   | 0.516 6728 | 9.980 738  | 119 | 50 |    |
|    | 10 | 9.466 8487 | 682 | 9.485 5555 | 753   | 0.516 3457 | 9.980 643  | 120 | 40 |    |
|    | 20 | 9.466 9686 | 682 | 9.485 5597 | 753   | 0.516 0186 | 9.980 548  | 121 | 30 |    |
|    | 30 | 9.466 6085 | 682 | 9.485 5639 | 753   | 0.515 6915 | 9.980 453  | 122 | 20 |    |
|    | 40 | 9.466 7284 | 682 | 9.485 5681 | 753   | 0.515 3644 | 9.980 358  | 123 | 10 |    |
| 10 | 0  | 9.466 8483 | 682 | 9.485 5723 | 753   | 0.515 0373 | 9.980 263  | 124 | 0  | 50 |
|    | 10 | 9.466 9682 | 682 | 9.485 5765 | 753   | 0.514 7102 | 9.980 168  | 125 | 50 |    |
|    | 20 | 9.466 6081 | 682 | 9.485 5807 | 753   | 0.514 3831 | 9.980 73   | 126 | 40 |    |
|    | 30 | 9.466 7280 | 682 | 9.485 5849 | 753   | 0.514 0560 | 9.980 63   | 127 | 30 |    |
|    | 40 | 9.466 8479 | 682 | 9.485 5891 | 753   | 0.513 7289 | 9.980 53   | 128 | 20 |    |
| 10 | 0  | 9.466 9678 | 682 | 9.485 5933 | 753   | 0.513 4018 | 9.980 43   | 129 | 10 |    |
|    | 10 | 9.466 6077 | 682 | 9.485 5975 | 753   | 0.513 0747 | 9.980 33   | 130 | 0  | 49 |
|    | 20 | 9.466 7276 | 682 | 9.485 6017 | 753   | 0.512 7476 | 9.980 23   | 131 | 50 |    |
|    | 30 | 9.466 8475 | 682 | 9.485 6059 | 753   | 0.512 4205 | 9.980 13   | 132 | 40 |    |
|    | 40 | 9.466 9674 | 682 | 9.485 6101 | 753   | 0.512 0934 | 9.980 3    | 133 | 30 |    |
| 10 | 0  | 9.466 6073 | 682 | 9.485 6143 | 753   | 0.511 7663 | 9.980 93   | 134 | 20 |    |
|    | 10 | 9.466 7272 | 682 | 9.485 6185 | 753   | 0.511 4392 | 9.980 83   | 135 | 10 |    |
|    | 20 | 9.466 8471 | 682 | 9.485 6227 | 753   | 0.511 1121 | 9.980 73   | 136 | 0  | 48 |
|    | 30 | 9.466 9670 | 682 | 9.485 6269 | 753   | 0.510 7850 | 9.980 63   | 137 | 50 |    |
|    | 40 | 9.466 6069 | 682 | 9.485 6311 | 753   | 0.510 4579 | 9.980 53   | 138 | 40 |    |
| 10 | 0  | 9.466 7268 | 682 | 9.485 6353 | 753   | 0.510 1308 | 9.980 43   | 139 | 30 |    |
|    | 10 | 9.466 8467 | 682 | 9.485 6395 | 753   | 0.509 8037 | 9.980 33   | 140 | 20 |    |
|    | 20 | 9.466 9666 | 682 | 9.485 6437 | 753   | 0.509 4766 | 9.980 23   | 141 | 10 |    |
|    | 30 | 9.466 6065 | 682 | 9.485 6479 | 753   | 0.509 1495 | 9.980 13   | 142 | 0  | 47 |
|    | 40 | 9.466 7264 | 682 | 9.485 6521 | 753   | 0.508 8224 | 9.980 3    | 143 | 50 |    |
| 10 | 0  | 9.466 8463 | 682 | 9.485 6563 | 753   | 0.508 4953 | 9.980 93   | 144 | 40 |    |
|    | 10 | 9.466 9662 | 682 | 9.485 6605 | 753   | 0.508 1682 | 9.980 83   | 145 | 30 |    |
|    | 20 | 9.466 6061 | 682 | 9.485 6647 | 753   | 0.507 8411 | 9.980 73   | 146 | 20 |    |
|    | 30 | 9.466 7260 | 682 | 9.485 6689 | 753   | 0.507 5140 | 9.980 63   | 147 | 10 |    |
|    | 40 | 9.466 8459 | 682 | 9.485 6731 | 753   | 0.507 1869 | 9.980 53   | 148 | 0  | 46 |
| 10 | 0  | 9.466 9658 | 682 | 9.485 6773 | 753   | 0.506 8598 | 9.980 43   | 149 | 50 |    |
|    | 10 | 9.466 6057 | 682 | 9.485 6815 | 753   | 0.506 5327 | 9.980 33   | 150 | 40 |    |
|    | 20 | 9.466 7256 | 682 | 9.485 6857 | 753   | 0.506 2056 | 9.980 23   | 151 | 30 |    |
|    | 30 | 9.466 8455 | 682 | 9.485 6899 | 753   | 0.505 8785 | 9.980 13   | 152 | 20 |    |
|    | 40 | 9.466 9654 | 682 | 9.485 6941 | 753   | 0.505 5514 | 9.980 3    | 153 | 10 |    |
| 10 | 0  | 9.466 6053 | 682 | 9.485 6983 | 753   | 0.505 2243 | 9.980 93   | 154 | 0  | 45 |
|    | 10 | 9.466 7252 | 682 | 9.485 7025 | 753   | 0.504 8972 | 9.980 83   | 155 | 50 |    |
|    | 20 | 9.466 8451 | 682 | 9.485 7067 | 753   | 0.504 5701 | 9.980 73   | 156 | 40 |    |
|    | 30 | 9.466 9650 | 682 | 9.485 7109 | 753   | 0.504 2430 | 9.980 63   | 157 | 30 |    |
|    | 40 | 9.466 6049 | 682 | 9.485 7151 | 753   | 0.503 9159 | 9.980 53   | 158 | 20 |    |
| 10 | 0  | 9.466 7248 | 682 | 9.485 7193 | 753   | 0.503 5888 | 9.980 43   | 159 | 10 |    |
|    | 10 | 9.466 8447 | 682 | 9.485 7235 | 753   | 0.503 2617 | 9.980 33   | 160 | 0  | 44 |
|    | 20 | 9.466 9646 | 682 | 9.485 7277 | 753   | 0.502 9346 | 9.980 23   | 161 | 50 |    |
|    | 30 | 9.466 6045 | 682 | 9.485 7319 | 753   | 0.502 6075 | 9.980 13   | 162 | 40 |    |
|    | 40 | 9.466 7244 | 682 | 9.485 7361 | 753   | 0.502 2804 | 9.980 3    | 163 | 30 |    |
| 10 | 0  | 9.466 8443 | 682 | 9.485 7403 | 753   | 0.501 9533 | 9.980 93   | 164 | 20 |    |
|    | 10 | 9.466 9642 | 682 | 9.485 7445 | 753   | 0.501 6262 | 9.980 83   | 165 | 10 |    |
|    | 20 | 9.466 6041 | 682 | 9.485 7487 | 753   | 0.501 2991 | 9.980 73   | 166 | 0  | 43 |
|    | 30 | 9.466 7240 | 682 | 9.485 7529 | 753   | 0.500 9720 | 9.980 63   | 167 | 50 |    |
|    | 40 | 9.466 8439 | 682 | 9.485 7571 | 753   | 0.500 6449 | 9.980 53   | 168 | 40 |    |
| 10 | 0  | 9.466 9638 | 682 | 9.485 7613 | 753   | 0.500 3178 | 9.980 43   | 169 | 30 |    |
|    | 10 | 9.466 6037 | 682 | 9.485 7655 | 753   | 0.500 0007 | 9.980 33   | 170 | 20 |    |
|    | 20 | 9.466 7236 | 682 | 9.485 7697 | 753   | 0.499 6736 | 9.980 23   | 171 | 10 |    |
|    | 30 | 9.466 8435 | 682 | 9.485 7739 | 753   | 0.499 3465 | 9.980 13   | 172 | 0  | 42 |
|    | 40 | 9.466 9634 | 682 | 9.485 7781 | 753   | 0.499 0194 | 9.980 3    | 173 | 50 |    |
| 10 | 0  | 9.466 6033 | 682 | 9.485 7823 | 753   | 0.498 6923 | 9.980 93   | 174 | 40 |    |
|    | 10 | 9.466 7232 | 682 | 9.485 7865 | 753   | 0.498 3652 | 9.980 83   | 175 | 30 |    |
|    | 20 | 9.466 8431 | 682 | 9.485 7907 | 753   | 0.498 0381 | 9.980 73   | 176 | 20 |    |
|    | 30 | 9.466 9630 | 682 | 9.485 7949 | 753   | 0.497 7110 | 9.980 63   | 177 | 10 |    |
|    | 40 | 9.466 6029 | 682 | 9.485 7991 | 753   | 0.497 3839 | 9.980 53   | 178 | 0  | 41 |
| 10 | 0  | 9.466 7228 | 682 | 9.48       |       |            |            |     |    |    |



| i  | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d. | "  | i  |
|----|----|------------|-----|------------|-------|------------|------------|----|----|----|
| 10 | o  | 9.470 0461 | 681 | 9.489 8380 | 747   | 0.510 1620 | 9.980 2081 | 65 | o  | 50 |
| 10 | 10 | 9.470 1142 | 682 | 9.489 9127 | 746   | 0.510 0873 | 9.980 2016 | 65 | 50 |    |
| 20 | 20 | 9.470 1824 | 681 | 9.489 9873 | 747   | 0.510 0127 | 9.980 1951 | 65 | 40 |    |
| 30 | 30 | 9.470 2505 | 681 | 9.490 0620 | 746   | 0.509 9380 | 9.980 1886 | 65 | 30 |    |
| 40 | 40 | 9.470 3186 | 681 | 9.490 1366 | 746   | 0.509 8634 | 9.980 1820 | 65 | 20 |    |
| 50 | 50 | 9.470 3867 | 681 | 9.490 2112 | 746   | 0.509 7888 | 9.980 1755 | 65 | 10 |    |
| 11 | o  | 9.470 4548 | 681 | 9.490 2858 | 746   | 0.509 7142 | 9.980 1690 | 65 | o  | 49 |
| 10 | 10 | 9.470 5229 | 681 | 9.490 3604 | 746   | 0.509 6396 | 9.980 1625 | 65 | 50 |    |
| 20 | 20 | 9.470 5910 | 680 | 9.490 4350 | 746   | 0.509 5650 | 9.980 1560 | 65 | 40 |    |
| 30 | 30 | 9.470 6590 | 681 | 9.490 5096 | 745   | 0.509 4904 | 9.980 1495 | 65 | 30 |    |
| 40 | 40 | 9.470 7271 | 680 | 9.490 5841 | 745   | 0.509 4159 | 9.980 1430 | 65 | 20 |    |
| 50 | 50 | 9.470 7951 | 680 | 9.490 6587 | 745   | 0.509 3413 | 9.980 1365 | 65 | 10 |    |
| 12 | o  | 9.470 8631 | 681 | 9.490 7332 | 745   | 0.509 2668 | 9.980 1299 | 65 | o  | 48 |
| 10 | 10 | 9.470 9312 | 680 | 9.490 8077 | 746   | 0.509 1923 | 9.980 1234 | 65 | 50 |    |
| 20 | 20 | 9.470 9992 | 679 | 9.490 8823 | 745   | 0.509 1177 | 9.980 1169 | 65 | 40 |    |
| 30 | 30 | 9.471 0671 | 680 | 9.490 9568 | 745   | 0.509 0432 | 9.980 1104 | 65 | 30 |    |
| 40 | 40 | 9.471 1351 | 680 | 9.491 0313 | 745   | 0.508 9687 | 9.980 1039 | 65 | 20 |    |
| 50 | 50 | 9.471 2031 | 679 | 9.491 1058 | 744   | 0.508 8942 | 9.980 0973 | 65 | 10 |    |
| 13 | o  | 9.471 2710 | 680 | 9.491 1802 | 745   | 0.508 8198 | 9.980 0908 | 65 | o  | 47 |
| 10 | 10 | 9.471 3390 | 679 | 9.491 2547 | 745   | 0.508 7453 | 9.980 0843 | 65 | 50 |    |
| 20 | 20 | 9.471 4069 | 679 | 9.491 3292 | 744   | 0.508 6708 | 9.980 0778 | 65 | 40 |    |
| 30 | 30 | 9.471 4748 | 679 | 9.491 4036 | 744   | 0.508 5964 | 9.980 0712 | 65 | 30 |    |
| 40 | 40 | 9.471 5427 | 679 | 9.491 4780 | 745   | 0.508 5220 | 9.980 0647 | 65 | 20 |    |
| 50 | 50 | 9.471 6106 | 679 | 9.491 5525 | 744   | 0.508 4475 | 9.980 0582 | 65 | 10 |    |
| 14 | o  | 9.471 6785 | 679 | 9.491 6269 | 744   | 0.508 3731 | 9.980 0516 | 65 | o  | 46 |
| 10 | 10 | 9.471 7464 | 679 | 9.491 7013 | 744   | 0.508 2987 | 9.980 0451 | 65 | 50 |    |
| 20 | 20 | 9.471 8143 | 678 | 9.491 7757 | 744   | 0.508 2243 | 9.980 0386 | 65 | 40 |    |
| 30 | 30 | 9.471 8821 | 678 | 9.491 8501 | 743   | 0.508 1499 | 9.980 0320 | 65 | 30 |    |
| 40 | 40 | 9.471 9499 | 678 | 9.491 9244 | 744   | 0.508 0756 | 9.980 0255 | 65 | 20 |    |
| 50 | 50 | 9.472 0178 | 679 | 9.491 9988 | 743   | 0.508 0012 | 9.980 0190 | 65 | 10 |    |
| 15 | o  | 9.472 0856 | 678 | 9.492 0731 | 744   | 0.507 9269 | 9.980 0124 | 65 | o  | 45 |
| 10 | 10 | 9.472 1534 | 678 | 9.492 1475 | 743   | 0.507 8525 | 9.980 0059 | 65 | 50 |    |
| 20 | 20 | 9.472 2212 | 678 | 9.492 2218 | 743   | 0.507 7782 | 9.979 9994 | 65 | 40 |    |
| 30 | 30 | 9.472 2890 | 677 | 9.492 2961 | 744   | 0.507 7039 | 9.979 9928 | 65 | 30 |    |
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| 10 | 10 | 9.472 5600 | 677 | 9.492 5933 | 743   | 0.507 4067 | 9.979 9666 | 65 | 50 |    |
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| 10 | 10 | 9.472 9661 | 677 | 9.493 0388 | 742   | 0.506 9612 | 9.979 9274 | 65 | 50 |    |
| 20 | 20 | 9.473 0338 | 676 | 9.493 1130 | 742   | 0.506 8870 | 9.979 9208 | 65 | 40 |    |
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| 40 | 40 | 9.473 1690 | 676 | 9.493 2614 | 741   | 0.506 7386 | 9.979 9077 | 65 | 20 |    |
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| 10 | 10 | 9.473 3719 | 675 | 9.493 4838 | 742   | 0.506 5162 | 9.979 8880 | 65 | 50 |    |
| 20 | 20 | 9.473 4394 | 676 | 9.493 5580 | 741   | 0.506 4420 | 9.979 8815 | 65 | 40 |    |
| 30 | 30 | 9.473 5070 | 676 | 9.493 6321 | 741   | 0.506 3679 | 9.979 8749 | 65 | 30 |    |
| 40 | 40 | 9.473 5746 | 675 | 9.493 7062 | 742   | 0.506 2938 | 9.979 8683 | 65 | 20 |    |
| 50 | 50 | 9.473 6421 | 676 | 9.493 7804 | 741   | 0.506 2196 | 9.979 8618 | 65 | 10 |    |
| 19 | o  | 9.473 7097 | 675 | 9.493 8545 | 740   | 0.506 1455 | 9.979 8552 | 65 | o  | 41 |
| 10 | 10 | 9.473 7772 | 675 | 9.493 9285 | 741   | 0.506 0715 | 9.979 8486 | 65 | 50 |    |
| 20 | 20 | 9.473 8447 | 675 | 9.494 0026 | 741   | 0.505 9974 | 9.979 8421 | 65 | 40 |    |
| 30 | 30 | 9.473 9122 | 675 | 9.494 0767 | 741   | 0.505 9233 | 9.979 8355 | 65 | 30 |    |
| 40 | 40 | 9.473 9797 | 675 | 9.494 1508 | 740   | 0.505 8492 | 9.979 8289 | 65 | 20 |    |
| 50 | 50 | 9.474 0472 | 674 | 9.494 2248 | 740   | 0.505 7752 | 9.979 8224 | 65 | 10 |    |
| 20 | o  | 9.474 1146 |     | 9.494 2988 |       | 0.505 7012 | 9.979 8158 | 65 | o  | 40 |

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|    | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d. | "  |    |
|----|----|------------|-----|------------|-------|------------|------------|----|----|----|
| 30 | o  | 9.478 1418 | 668 | 9.498 7223 | 734   | 0.501 2777 | 9.979 4195 | 66 | o  | 30 |
|    | 10 | 9.478 2086 | 667 | 9.498 7957 | 734   | 0.501 2043 | 9.979 4129 | 67 | 50 |    |
|    | 20 | 9.478 2753 | 668 | 9.498 8691 | 734   | 0.501 1309 | 9.979 4062 | 66 | 40 |    |
|    | 30 | 9.478 3421 | 667 | 9.498 9425 | 734   | 0.501 0575 | 9.979 3996 | 67 | 30 |    |
|    | 40 | 9.478 4088 | 668 | 9.499 0159 | 734   | 0.500 9841 | 9.979 3929 | 66 | 20 |    |
|    | 50 | 9.478 4756 | 667 | 9.499 0893 | 733   | 0.500 9107 | 9.979 3863 | 67 | 10 |    |
| 31 | o  | 9.478 5423 | 667 | 9.499 1626 | 734   | 0.500 8374 | 9.979 3796 | 66 | o  | 29 |
|    | 10 | 9.478 6090 | 667 | 9.499 2360 | 733   | 0.500 7640 | 9.979 3730 | 66 | 50 |    |
|    | 20 | 9.478 6757 | 667 | 9.499 3093 | 733   | 0.500 6907 | 9.979 3664 | 67 | 40 |    |
|    | 30 | 9.478 7424 | 666 | 9.499 3826 | 734   | 0.500 6174 | 9.979 3597 | 66 | 30 |    |
|    | 40 | 9.478 8090 | 667 | 9.499 4560 | 733   | 0.500 5440 | 9.979 3531 | 67 | 20 |    |
|    | 50 | 9.478 8757 | 666 | 9.499 5293 | 733   | 0.500 4707 | 9.979 3464 | 66 | 10 |    |
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|    | 10 | 9.479 0090 | 666 | 9.499 6759 | 732   | 0.500 3241 | 9.979 3331 | 66 | 50 |    |
|    | 20 | 9.479 0756 | 666 | 9.499 7491 | 733   | 0.500 2509 | 9.979 3265 | 67 | 40 |    |
|    | 30 | 9.479 1422 | 666 | 9.499 8224 | 733   | 0.500 1776 | 9.979 3198 | 67 | 30 |    |
|    | 40 | 9.479 2088 | 666 | 9.499 8957 | 732   | 0.500 1043 | 9.979 3131 | 66 | 20 |    |
|    | 50 | 9.479 2754 | 666 | 9.499 9689 | 733   | 0.500 0311 | 9.979 3065 | 67 | 10 |    |
| 33 | o  | 9.479 3420 | 666 | 9.500 0422 | 732   | 0.499 9578 | 9.979 2998 | 66 | o  | 27 |
|    | 10 | 9.479 4086 | 665 | 9.500 1154 | 732   | 0.499 8846 | 9.979 2932 | 67 | 50 |    |
|    | 20 | 9.479 4751 | 666 | 9.500 1886 | 732   | 0.499 8114 | 9.979 2865 | 67 | 40 |    |
|    | 30 | 9.479 5417 | 665 | 9.500 2618 | 732   | 0.499 7382 | 9.979 2798 | 66 | 30 |    |
|    | 40 | 9.479 6082 | 665 | 9.500 3350 | 732   | 0.499 6650 | 9.979 2732 | 67 | 20 |    |
|    | 50 | 9.479 6747 | 665 | 9.500 4082 | 732   | 0.499 5918 | 9.979 2665 | 66 | 10 |    |
| 34 | o  | 9.479 7412 | 665 | 9.500 4814 | 732   | 0.499 5186 | 9.979 2599 | 67 | o  | 26 |
|    | 10 | 9.479 8077 | 665 | 9.500 5546 | 731   | 0.499 4454 | 9.979 2532 | 67 | 50 |    |
|    | 20 | 9.479 8742 | 665 | 9.500 6277 | 732   | 0.499 3723 | 9.979 2465 | 67 | 40 |    |
|    | 30 | 9.479 9407 | 665 | 9.500 7009 | 731   | 0.499 2991 | 9.979 2398 | 66 | 30 |    |
|    | 40 | 9.480 0072 | 664 | 9.500 7740 | 731   | 0.499 2260 | 9.979 2332 | 67 | 20 |    |
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| 37 | o  | 9.480 9366 | 663 | 9.501 7969 | 730   | 0.498 2031 | 9.979 1397 | 67 | o  | 23 |
|    | 10 | 9.481 0029 | 663 | 9.501 8699 | 730   | 0.498 1301 | 9.979 1330 | 67 | 50 |    |
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|    | 40 | 9.481 2017 | 663 | 9.502 0888 | 729   | 0.497 9112 | 9.979 1129 | 67 | 20 |    |
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|    | 10 | 9.481 4005 | 662 | 9.502 3076 | 729   | 0.497 6924 | 9.979 0929 | 67 | 50 |    |
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|    | 40 | 9.481 9961 | 661 | 9.502 9635 | 728   | 0.497 0365 | 9.979 0326 | 67 | 20 |    |
|    | 50 | 9.482 0622 | 661 | 9.503 0363 | 729   | 0.496 9637 | 9.979 0259 | 67 | 10 |    |
| 40 | o  | 9.482 1283 |     | 9.503 1092 |       | 0.496 8908 | 9.979 0192 |    | o  | 20 |
|    | "  | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d. | "  |    |

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|----|----|------------|-----|------------|-------|-------------|------------|----|----|----|
| 40 | 0  | 9.482 1231 | 661 | 9.503 1092 | 728   | 0.496 89 38 | 9.979 0192 | 67 | 0  | 20 |
|    | 10 | 9.482 1914 | 661 | 9.503 1820 | 728   | 0.496 8130  | 9.979 0145 |    | 50 |    |
|    | 20 | 9.482 2605 | 661 | 9.503 2548 | 728   | 0.496 7452  | 9.979 0097 |    | 40 |    |
|    | 30 | 9.482 3266 | 661 | 9.503 3276 | 727   | 0.496 6774  | 9.978 9999 |    | 30 |    |
|    | 40 | 9.482 3927 | 661 | 9.503 4001 | 728   | 0.496 6097  | 9.978 9923 |    | 20 |    |
|    | 50 | 9.482 4587 | 661 | 9.503 4741 | 728   | 0.496 5409  | 9.978 9856 |    | 10 |    |
| 41 | 0  | 9.482 5248 | 660 | 9.503 5459 | 727   | 0.496 4741  | 9.978 9789 | 67 | 0  | 19 |
|    | 10 | 9.482 5908 | 660 | 9.503 6186 | 727   | 0.496 4083  | 9.978 9722 |    | 50 |    |
|    | 20 | 9.482 6568 | 660 | 9.503 6913 | 728   | 0.496 3425  | 9.978 9655 |    | 40 |    |
|    | 30 | 9.482 7228 | 660 | 9.503 7641 | 727   | 0.496 2767  | 9.978 9588 |    | 30 |    |
|    | 40 | 9.482 7888 | 660 | 9.503 8368 | 727   | 0.496 2109  | 9.978 9521 |    | 20 |    |
|    | 50 | 9.482 8548 | 660 | 9.503 9095 | 727   | 0.496 1451  | 9.978 9454 |    | 10 |    |
| 42 | 0  | 9.482 9208 | 660 | 9.504 9823 | 727   | 0.496 0793  | 9.978 9386 | 67 | 0  | 18 |
|    | 10 | 9.482 9868 | 659 | 9.504 0549 | 727   | 0.495 9135  | 9.978 9319 |    | 50 |    |
|    | 20 | 9.483 0527 | 660 | 9.504 1276 | 726   | 0.495 8477  | 9.978 9252 |    | 40 |    |
|    | 30 | 9.483 1187 | 659 | 9.504 2004 | 727   | 0.495 7819  | 9.978 9184 |    | 30 |    |
|    | 40 | 9.483 1846 | 659 | 9.504 2732 | 727   | 0.495 7161  | 9.978 9117 |    | 20 |    |
|    | 50 | 9.483 2505 | 660 | 9.504 3460 | 726   | 0.495 6503  | 9.978 9050 |    | 10 |    |
| 43 | 0  | 9.483 3165 | 659 | 9.504 4188 | 726   | 0.495 5845  | 9.978 8983 | 68 | 0  | 17 |
|    | 10 | 9.483 3824 | 659 | 9.504 4916 | 726   | 0.495 5187  | 9.978 8915 |    | 50 |    |
|    | 20 | 9.483 4484 | 658 | 9.504 5644 | 727   | 0.495 4529  | 9.978 8848 |    | 40 |    |
|    | 30 | 9.483 5144 | 659 | 9.504 6372 | 726   | 0.495 3871  | 9.978 8781 |    | 30 |    |
|    | 40 | 9.483 5803 | 659 | 9.504 7100 | 725   | 0.495 3213  | 9.978 8714 |    | 20 |    |
|    | 50 | 9.483 6463 | 658 | 9.504 7828 | 726   | 0.495 2555  | 9.978 8646 |    | 10 |    |
| 44 | 0  | 9.483 7123 | 659 | 9.504 8556 | 726   | 0.495 1897  | 9.978 8579 | 67 | 0  | 16 |
|    | 10 | 9.483 7783 | 658 | 9.504 9284 | 726   | 0.495 1239  | 9.978 8512 |    | 50 |    |
|    | 20 | 9.483 8443 | 658 | 9.504 9991 | 725   | 0.495 0581  | 9.978 8444 |    | 40 |    |
|    | 30 | 9.483 9103 | 658 | 9.505 0719 | 725   | 0.494 9923  | 9.978 8377 |    | 30 |    |
|    | 40 | 9.483 9763 | 658 | 9.505 1447 | 725   | 0.494 9265  | 9.978 8310 |    | 20 |    |
|    | 50 | 9.484 0423 | 658 | 9.505 2175 | 726   | 0.494 8607  | 9.978 8243 |    | 10 |    |
| 45 | 0  | 9.484 1083 | 657 | 9.505 2891 | 725   | 0.494 7949  | 9.978 8175 | 68 | 0  | 15 |
|    | 10 | 9.484 1743 | 658 | 9.505 3619 | 725   | 0.494 7291  | 9.978 8108 |    | 50 |    |
|    | 20 | 9.484 2403 | 657 | 9.505 4347 | 725   | 0.494 6633  | 9.978 8041 |    | 40 |    |
|    | 30 | 9.484 3063 | 658 | 9.505 5075 | 725   | 0.494 5975  | 9.978 7974 |    | 30 |    |
|    | 40 | 9.484 3723 | 657 | 9.505 5803 | 725   | 0.494 5317  | 9.978 7907 |    | 20 |    |
|    | 50 | 9.484 4383 | 657 | 9.505 6531 | 724   | 0.494 4659  | 9.978 7840 |    | 10 |    |
| 46 | 0  | 9.484 5043 | 657 | 9.505 7247 | 724   | 0.494 4001  | 9.978 7773 | 67 | 0  | 14 |
|    | 10 | 9.484 5703 | 657 | 9.505 7975 | 724   | 0.494 3343  | 9.978 7706 |    | 50 |    |
|    | 20 | 9.484 6363 | 657 | 9.505 8703 | 724   | 0.494 2685  | 9.978 7639 |    | 40 |    |
|    | 30 | 9.484 6983 | 657 | 9.505 9431 | 723   | 0.494 2027  | 9.978 7572 |    | 30 |    |
|    | 40 | 9.484 7643 | 656 | 9.506 0159 | 724   | 0.494 1369  | 9.978 7505 |    | 20 |    |
|    | 50 | 9.484 8303 | 657 | 9.506 0887 | 724   | 0.494 0711  | 9.978 7438 |    | 10 |    |
| 47 | 0  | 9.484 8963 | 656 | 9.506 1603 | 723   | 0.494 0053  | 9.978 7371 | 67 | 0  | 13 |
|    | 10 | 9.484 9623 | 657 | 9.506 2331 | 723   | 0.493 9395  | 9.978 7304 |    | 50 |    |
|    | 20 | 9.485 0283 | 656 | 9.506 3059 | 723   | 0.493 8737  | 9.978 7237 |    | 40 |    |
|    | 30 | 9.485 0943 | 656 | 9.506 3787 | 723   | 0.493 8079  | 9.978 7170 |    | 30 |    |
|    | 40 | 9.485 1603 | 656 | 9.506 4515 | 722   | 0.493 7421  | 9.978 7103 |    | 20 |    |
|    | 50 | 9.485 2263 | 656 | 9.506 5243 | 723   | 0.493 6763  | 9.978 7036 |    | 10 |    |
| 48 | 0  | 9.485 2923 | 655 | 9.506 5959 | 723   | 0.493 6105  | 9.978 6969 | 68 | 0  | 12 |
|    | 10 | 9.485 3583 | 656 | 9.506 6687 | 723   | 0.493 5447  | 9.978 6902 |    | 50 |    |
|    | 20 | 9.485 4243 | 656 | 9.506 7415 | 723   | 0.493 4789  | 9.978 6835 |    | 40 |    |
|    | 30 | 9.485 4903 | 655 | 9.506 8143 | 723   | 0.493 4131  | 9.978 6768 |    | 30 |    |
|    | 40 | 9.485 5563 | 655 | 9.506 8871 | 723   | 0.493 3473  | 9.978 6701 |    | 20 |    |
|    | 50 | 9.485 6223 | 655 | 9.506 9599 | 723   | 0.493 2815  | 9.978 6634 |    | 10 |    |
| 49 | 0  | 9.485 6883 | 656 | 9.507 0315 | 723   | 0.493 2157  | 9.978 6567 | 67 | 0  | 11 |
|    | 10 | 9.485 7543 | 655 | 9.507 1043 | 723   | 0.493 1499  | 9.978 6500 |    | 50 |    |
|    | 20 | 9.485 8203 | 654 | 9.507 1771 | 723   | 0.493 0841  | 9.978 6433 |    | 40 |    |
|    | 30 | 9.485 8863 | 655 | 9.507 2499 | 723   | 0.493 0183  | 9.978 6366 |    | 30 |    |
|    | 40 | 9.485 9523 | 655 | 9.507 3227 | 722   | 0.492 9525  | 9.978 6299 |    | 20 |    |
|    | 50 | 9.486 0183 | 654 | 9.507 3955 | 723   | 0.492 8867  | 9.978 6232 |    | 10 |    |
| 50 | 0  | 9.486 0843 | 654 | 9.507 4683 | 723   | 0.492 8209  | 9.978 6165 | 67 | 0  | 10 |



|    | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d. | "  |    |
|----|----|------------|-----|------------|-------|------------|------------|----|----|----|
| 50 | 0  | 9.486 0749 | 655 | 9.507 4602 | 722   | 0.492 5398 | 9.978 6148 | 68 | 0  | 10 |
|    | 10 | 9.486 1404 | 654 | 9.507 5324 | 722   | 0.492 4676 | 9.978 6080 | 68 | 50 |    |
|    | 20 | 9.486 2058 | 654 | 9.507 6046 | 722   | 0.492 3954 | 9.978 6012 | 68 | 40 |    |
|    | 30 | 9.486 2712 | 654 | 9.507 6768 | 722   | 0.492 3232 | 9.978 5944 | 67 | 30 |    |
|    | 40 | 9.486 3366 | 654 | 9.507 7490 | 722   | 0.492 2510 | 9.978 5877 | 68 | 20 |    |
|    | 50 | 9.486 4020 | 654 | 9.507 8212 | 721   | 0.492 1788 | 9.978 5809 | 68 | 10 |    |
| 51 | 0  | 9.486 4674 | 654 | 9.507 8933 | 722   | 0.492 1067 | 9.978 5741 | 68 | 0  | 9  |
|    | 10 | 9.486 5328 | 654 | 9.507 9655 | 721   | 0.492 0345 | 9.978 5673 | 68 | 50 |    |
|    | 20 | 9.486 5982 | 653 | 9.508 0376 | 722   | 0.491 9624 | 9.978 5605 | 67 | 40 |    |
|    | 30 | 9.486 6635 | 654 | 9.508 1098 | 721   | 0.491 8902 | 9.978 5538 | 68 | 30 |    |
|    | 40 | 9.486 7289 | 653 | 9.508 1819 | 721   | 0.491 8181 | 9.978 5470 | 68 | 20 |    |
|    | 50 | 9.486 7942 | 653 | 9.508 2540 | 721   | 0.491 7460 | 9.978 5402 | 68 | 10 |    |
| 52 | 0  | 9.486 8595 | 653 | 9.508 3261 | 721   | 0.491 6739 | 9.978 5334 | 68 | 0  | 8  |
|    | 10 | 9.486 9248 | 653 | 9.508 3982 | 721   | 0.491 6018 | 9.978 5266 | 68 | 50 |    |
|    | 20 | 9.486 9901 | 653 | 9.508 4703 | 721   | 0.491 5297 | 9.978 5198 | 68 | 40 |    |
|    | 30 | 9.487 0554 | 653 | 9.508 5424 | 721   | 0.491 4576 | 9.978 5130 | 68 | 30 |    |
|    | 40 | 9.487 1207 | 653 | 9.508 6145 | 720   | 0.491 3855 | 9.978 5062 | 67 | 20 |    |
|    | 50 | 9.487 1860 | 652 | 9.508 6865 | 721   | 0.491 3135 | 9.978 4995 | 68 | 10 |    |
| 53 | 0  | 9.487 2512 | 653 | 9.508 7586 | 720   | 0.491 2414 | 9.978 4927 | 68 | 0  | 7  |
|    | 10 | 9.487 3165 | 652 | 9.508 8306 | 721   | 0.491 1694 | 9.978 4859 | 68 | 50 |    |
|    | 20 | 9.487 3817 | 653 | 9.508 9027 | 720   | 0.491 0973 | 9.978 4791 | 68 | 40 |    |
|    | 30 | 9.487 4470 | 652 | 9.508 9747 | 720   | 0.491 0253 | 9.978 4723 | 68 | 30 |    |
|    | 40 | 9.487 5122 | 652 | 9.509 0467 | 720   | 0.490 9533 | 9.978 4655 | 68 | 20 |    |
|    | 50 | 9.487 5774 | 652 | 9.509 1187 | 720   | 0.490 8813 | 9.978 4587 | 68 | 10 |    |
| 54 | 0  | 9.487 6426 | 652 | 9.509 1907 | 720   | 0.490 8093 | 9.978 4519 | 68 | 0  | 6  |
|    | 10 | 9.487 7078 | 651 | 9.509 2627 | 719   | 0.490 7373 | 9.978 4451 | 68 | 50 |    |
|    | 20 | 9.487 7729 | 652 | 9.509 3346 | 720   | 0.490 6654 | 9.978 4383 | 68 | 40 |    |
|    | 30 | 9.487 8381 | 651 | 9.509 4066 | 720   | 0.490 5934 | 9.978 4315 | 68 | 30 |    |
|    | 40 | 9.487 9032 | 652 | 9.509 4786 | 719   | 0.490 5214 | 9.978 4247 | 68 | 20 |    |
|    | 50 | 9.487 9684 | 651 | 9.509 5505 | 719   | 0.490 4495 | 9.978 4179 | 68 | 10 |    |
| 55 | 0  | 9.488 0335 | 651 | 9.509 6224 | 720   | 0.490 3776 | 9.978 4111 | 69 | 0  | 5  |
|    | 10 | 9.488 0986 | 651 | 9.509 6944 | 719   | 0.490 3056 | 9.978 4042 | 68 | 50 |    |
|    | 20 | 9.488 1637 | 651 | 9.509 7663 | 719   | 0.490 2337 | 9.978 3974 | 68 | 40 |    |
|    | 30 | 9.488 2288 | 651 | 9.509 8382 | 719   | 0.490 1618 | 9.978 3906 | 68 | 30 |    |
|    | 40 | 9.488 2939 | 651 | 9.509 9101 | 719   | 0.490 0899 | 9.978 3838 | 68 | 20 |    |
|    | 50 | 9.488 3590 | 650 | 9.509 9820 | 719   | 0.490 0180 | 9.978 3770 | 68 | 10 |    |
| 56 | 0  | 9.488 4240 | 651 | 9.510 0539 | 718   | 0.489 9461 | 9.978 3702 | 68 | 0  | 4  |
|    | 10 | 9.488 4891 | 650 | 9.510 1257 | 719   | 0.489 8743 | 9.978 3634 | 68 | 50 |    |
|    | 20 | 9.488 5541 | 651 | 9.510 1976 | 718   | 0.489 8024 | 9.978 3566 | 69 | 40 |    |
|    | 30 | 9.488 6192 | 650 | 9.510 2694 | 719   | 0.489 7306 | 9.978 3497 | 68 | 30 |    |
|    | 40 | 9.488 6842 | 650 | 9.510 3413 | 718   | 0.489 6587 | 9.978 3429 | 68 | 20 |    |
|    | 50 | 9.488 7492 | 650 | 9.510 4131 | 718   | 0.489 5869 | 9.978 3361 | 68 | 10 |    |
| 57 | 0  | 9.488 8142 | 650 | 9.510 4849 | 718   | 0.489 5151 | 9.978 3293 | 68 | 0  | 3  |
|    | 10 | 9.488 8792 | 650 | 9.510 5567 | 718   | 0.489 4433 | 9.978 3225 | 69 | 50 |    |
|    | 20 | 9.488 9442 | 649 | 9.510 6285 | 718   | 0.489 3715 | 9.978 3156 | 68 | 40 |    |
|    | 30 | 9.489 0091 | 650 | 9.510 7003 | 718   | 0.489 2997 | 9.978 3088 | 68 | 30 |    |
|    | 40 | 9.489 0741 | 649 | 9.510 7721 | 718   | 0.489 2279 | 9.978 3020 | 68 | 20 |    |
|    | 50 | 9.489 1390 | 650 | 9.510 8439 | 717   | 0.489 1561 | 9.978 2952 | 69 | 10 |    |
| 58 | 0  | 9.489 2040 | 649 | 9.510 9156 | 718   | 0.489 0844 | 9.978 2883 | 68 | 0  | 2  |
|    | 10 | 9.489 2689 | 649 | 9.510 9874 | 717   | 0.489 0126 | 9.978 2815 | 68 | 50 |    |
|    | 20 | 9.489 3338 | 649 | 9.511 0591 | 718   | 0.488 9409 | 9.978 2747 | 68 | 40 |    |
|    | 30 | 9.489 3987 | 649 | 9.511 1309 | 717   | 0.488 8691 | 9.978 2679 | 69 | 30 |    |
|    | 40 | 9.489 4636 | 649 | 9.511 2026 | 717   | 0.488 7974 | 9.978 2610 | 68 | 20 |    |
|    | 50 | 9.489 5285 | 649 | 9.511 2743 | 717   | 0.488 7257 | 9.978 2542 | 68 | 10 |    |
| 59 | 0  | 9.489 5934 | 648 | 9.511 3460 | 717   | 0.488 6540 | 9.978 2474 | 69 | 0  | 1  |
|    | 10 | 9.489 6582 | 649 | 9.511 4177 | 717   | 0.488 5823 | 9.978 2405 | 68 | 50 |    |
|    | 20 | 9.489 7231 | 648 | 9.511 4894 | 717   | 0.488 5106 | 9.978 2337 | 69 | 40 |    |
|    | 30 | 9.489 7879 | 648 | 9.511 5611 | 716   | 0.488 4389 | 9.978 2268 | 68 | 30 |    |
|    | 40 | 9.489 8527 | 649 | 9.511 6327 | 717   | 0.488 3673 | 9.978 2200 | 68 | 20 |    |
|    | 50 | 9.489 9176 | 648 | 9.511 7044 | 716   | 0.488 2956 | 9.978 2132 | 69 | 10 |    |
| 60 | 0  | 9.489 9824 |     | 9.511 7760 |       | 0.488 2240 | 9.978 2063 |    | 0  | 0  |
|    | "  | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d. | "  |    |

722  
1) 72.2  
2) 144.4  
3) 216.6  
4) 288.8  
5) 361.0  
6) 433.2  
7) 505.4  
8) 577.6  
9) 649.8

719  
1) 71.9  
2) 143.7  
3) 215.5  
4) 287.3  
5) 359.1  
6) 430.9  
7) 502.7  
8) 574.5  
9) 646.3

716  
1) 71.6  
2) 143.2  
3) 214.8  
4) 286.4  
5) 358.0  
6) 429.6  
7) 501.2  
8) 572.8  
9) 644.4

652  
1) 65.2  
2) 130.4  
3) 195.6  
4) 260.8  
5) 326.0  
6) 391.2  
7) 456.4  
8) 521.6  
9) 586.8

641  
1) 64.1  
2) 128.2  
3) 192.4  
4) 256.6  
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6) 385.0  
7) 449.2  
8) 513.4  
9) 577.6

68  
1) 6.8  
2) 13.6  
3) 20.4  
4) 27.2  
5) 34.0  
6) 40.8  
7) 47.6  
8) 54.4  
9) 61.2



717  
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2 141.4  
3 115.4  
4 106.3  
5 158.5  
6 110.1  
7 501.9  
8 571.6  
9 645.1

714  
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9 639.9

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644  
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2 128.8  
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4 157.6  
5 110.0  
6 186.1  
7 550.3  
8 515.1  
9 579.6

60  
1 6.9  
2 11.8  
3 10.7  
4 17.6  
5 14.5  
6 43.4  
7 48.1  
8 55.2  
9 61.1

| i | n  | sin        | d.   | Tang       | d. c. | Cotg       | Con        | d.  | n  | i  |
|---|----|------------|------|------------|-------|------------|------------|-----|----|----|
|   | 0  | 9.489 9824 | 6.48 | 9.511 7763 | 717   | 0.488 2240 | 9.978 2061 | 6.8 | 0  | 60 |
|   | 10 | 9.490 1119 | 6.47 | 9.511 8477 | 716   | 0.488 1524 | 9.978 1948 | 6.9 | 50 |    |
|   | 20 | 9.490 1119 | 6.48 | 9.511 9191 | 716   | 0.488 0807 | 9.978 1926 | 6.8 | 40 |    |
|   | 30 | 9.490 1767 | 6.18 | 9.511 9909 | 716   | 0.488 0091 | 9.978 1856 | 6.8 | 30 |    |
|   | 40 | 9.490 2415 | 6.17 | 9.512 0625 | 716   | 0.487 9375 | 9.978 1791 | 6.9 | 20 |    |
|   | 50 | 9.490 3062 | 6.18 | 9.512 1341 | 716   | 0.487 8659 | 9.978 1724 | 6.8 | 10 |    |
|   | 1  | 9.490 3710 | 6.17 | 9.512 2057 | 716   | 0.487 7943 | 9.978 1684 | 6.9 | 0  | 59 |
|   | 10 | 9.490 4357 | 6.17 | 9.512 2773 | 716   | 0.487 7227 | 9.978 1584 | 6.8 | 50 |    |
|   | 20 | 9.490 5004 | 6.17 | 9.512 3489 | 716   | 0.487 6511 | 9.978 1516 | 6.9 | 40 |    |
|   | 30 | 9.490 5651 | 6.17 | 9.512 4204 | 716   | 0.487 5796 | 9.978 1447 | 6.8 | 30 |    |
|   | 40 | 9.490 6298 | 6.17 | 9.512 4920 | 716   | 0.487 5080 | 9.978 1379 | 6.9 | 20 |    |
|   | 50 | 9.490 6945 | 6.17 | 9.512 5635 | 716   | 0.487 4365 | 9.978 1310 | 6.8 | 10 |    |
|   | 2  | 9.490 7592 | 6.17 | 9.512 6351 | 716   | 0.487 3649 | 9.978 1241 | 6.8 | 0  | 58 |
|   | 10 | 9.490 8239 | 6.16 | 9.512 7066 | 716   | 0.487 2934 | 9.978 1172 | 6.9 | 50 |    |
|   | 20 | 9.490 8886 | 6.16 | 9.512 7781 | 716   | 0.487 2219 | 9.978 1103 | 6.8 | 40 |    |
|   | 30 | 9.490 9532 | 6.16 | 9.512 8496 | 716   | 0.487 1503 | 9.978 1036 | 6.9 | 30 |    |
|   | 40 | 9.491 0178 | 6.16 | 9.512 9211 | 716   | 0.487 0788 | 9.978 0967 | 6.8 | 20 |    |
|   | 50 | 9.491 0825 | 6.17 | 9.512 9926 | 716   | 0.487 0072 | 9.978 0899 | 6.9 | 10 |    |
|   | 3  | 9.491 1471 | 6.16 | 9.513 0641 | 714   | 0.486 9357 | 9.978 0830 | 6.9 | 0  | 57 |
|   | 10 | 9.491 2117 | 6.16 | 9.513 1355 | 716   | 0.486 8641 | 9.978 0761 | 6.8 | 50 |    |
|   | 20 | 9.491 2763 | 6.15 | 9.513 2070 | 714   | 0.486 7926 | 9.978 0694 | 6.9 | 40 |    |
|   | 30 | 9.491 3408 | 6.16 | 9.513 2785 | 716   | 0.486 7210 | 9.978 0625 | 6.8 | 30 |    |
|   | 40 | 9.491 4054 | 6.16 | 9.513 3499 | 716   | 0.486 6494 | 9.978 0556 | 6.9 | 20 |    |
|   | 50 | 9.491 4700 | 6.15 | 9.513 4214 | 714   | 0.486 5778 | 9.978 0487 | 6.8 | 10 |    |
|   | 4  | 9.491 5345 | 6.16 | 9.513 4927 | 714   | 0.486 5063 | 9.978 0418 | 6.9 | 0  | 56 |
|   | 10 | 9.491 5991 | 6.15 | 9.513 5641 | 714   | 0.486 4347 | 9.978 0349 | 6.8 | 50 |    |
|   | 20 | 9.491 6636 | 6.15 | 9.513 6355 | 714   | 0.486 3631 | 9.978 0280 | 6.9 | 40 |    |
|   | 30 | 9.491 7281 | 6.15 | 9.513 7069 | 714   | 0.486 2915 | 9.978 0211 | 6.8 | 30 |    |
|   | 40 | 9.491 7926 | 6.15 | 9.513 7783 | 714   | 0.486 2199 | 9.978 0142 | 6.9 | 20 |    |
|   | 50 | 9.491 8571 | 6.15 | 9.513 8497 | 714   | 0.486 1483 | 9.978 0073 | 6.8 | 10 |    |
|   | 5  | 9.491 9216 | 6.15 | 9.513 9210 | 714   | 0.486 0767 | 9.978 0004 | 6.9 | 0  | 55 |
|   | 10 | 9.492 9861 | 6.14 | 9.514 0924 | 714   | 0.485 9951 | 9.977 9935 | 6.9 | 50 |    |
|   | 20 | 9.492 0505 | 6.15 | 9.514 1637 | 714   | 0.485 9235 | 9.977 9866 | 6.8 | 40 |    |
|   | 30 | 9.492 1150 | 6.14 | 9.514 2351 | 714   | 0.485 8519 | 9.977 9797 | 6.9 | 30 |    |
|   | 40 | 9.492 1794 | 6.15 | 9.514 3064 | 714   | 0.485 7803 | 9.977 9728 | 6.8 | 20 |    |
|   | 50 | 9.492 2439 | 6.14 | 9.514 3777 | 714   | 0.485 7087 | 9.977 9659 | 6.9 | 10 |    |
|   | 6  | 9.492 3083 | 6.14 | 9.514 4490 | 714   | 0.485 6371 | 9.977 9590 | 6.9 | 0  | 54 |
|   | 10 | 9.492 3727 | 6.14 | 9.514 5203 | 714   | 0.485 5655 | 9.977 9521 | 6.8 | 50 |    |
|   | 20 | 9.492 4371 | 6.14 | 9.514 5916 | 714   | 0.485 4939 | 9.977 9452 | 6.9 | 40 |    |
|   | 30 | 9.492 5015 | 6.14 | 9.514 5629 | 714   | 0.485 4223 | 9.977 9383 | 6.8 | 30 |    |
|   | 40 | 9.492 5659 | 6.14 | 9.514 6341 | 714   | 0.485 3507 | 9.977 9314 | 6.9 | 20 |    |
|   | 50 | 9.492 6303 | 6.14 | 9.514 7054 | 714   | 0.485 2791 | 9.977 9245 | 6.8 | 10 |    |
|   | 7  | 9.492 6946 | 6.14 | 9.514 7766 | 714   | 0.485 2075 | 9.977 9176 | 6.9 | 0  | 53 |
|   | 10 | 9.492 7590 | 6.13 | 9.514 8479 | 714   | 0.485 1359 | 9.977 9107 | 6.8 | 50 |    |
|   | 20 | 9.492 8233 | 6.13 | 9.514 9191 | 714   | 0.485 0643 | 9.977 9038 | 6.9 | 40 |    |
|   | 30 | 9.492 8876 | 6.13 | 9.514 9904 | 714   | 0.484 9927 | 9.977 8969 | 6.8 | 30 |    |
|   | 40 | 9.492 9520 | 6.13 | 9.515 0617 | 714   | 0.484 9211 | 9.977 8900 | 6.9 | 20 |    |
|   | 50 | 9.493 0163 | 6.13 | 9.515 1329 | 714   | 0.484 8495 | 9.977 8831 | 6.8 | 10 |    |
|   | 8  | 9.493 0806 | 6.13 | 9.515 2042 | 714   | 0.484 7779 | 9.977 8762 | 6.9 | 0  | 52 |
|   | 10 | 9.493 1449 | 6.13 | 9.515 2755 | 714   | 0.484 7063 | 9.977 8693 | 6.8 | 50 |    |
|   | 20 | 9.493 2091 | 6.13 | 9.515 3468 | 714   | 0.484 6347 | 9.977 8624 | 6.9 | 40 |    |
|   | 30 | 9.493 2734 | 6.12 | 9.515 4181 | 714   | 0.484 5631 | 9.977 8555 | 6.8 | 30 |    |
|   | 40 | 9.493 3376 | 6.13 | 9.515 4894 | 714   | 0.484 4915 | 9.977 8486 | 6.9 | 20 |    |
|   | 50 | 9.493 4019 | 6.13 | 9.515 5607 | 714   | 0.484 4199 | 9.977 8417 | 6.8 | 10 |    |
|   | 9  | 9.493 4661 | 6.13 | 9.515 6320 | 714   | 0.484 3483 | 9.977 8348 | 6.9 | 0  | 51 |
|   | 10 | 9.493 5304 | 6.12 | 9.515 7033 | 714   | 0.484 2767 | 9.977 8279 | 6.8 | 50 |    |
|   | 20 | 9.493 5946 | 6.12 | 9.515 7746 | 714   | 0.484 2051 | 9.977 8210 | 6.9 | 40 |    |
|   | 30 | 9.493 6588 | 6.12 | 9.515 8459 | 714   | 0.484 1335 | 9.977 8141 | 6.8 | 30 |    |
|   | 40 | 9.493 7230 | 6.12 | 9.515 9172 | 714   | 0.484 0619 | 9.977 8072 | 6.9 | 20 |    |
|   | 50 | 9.493 7871 | 6.12 | 9.515 9885 | 714   | 0.483 9903 | 9.977 8003 | 6.8 | 10 |    |
|   | 10 | 9.493 8513 | 6.12 | 9.516 0598 | 714   | 0.483 9187 | 9.977 7934 | 6.9 | 0  | 50 |
| i | n  | Con        | d.   | Cotg       | d. c. | Tang       | sin        | d.  | n  | i  |



|    | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d. | "  |    |
|----|----|------------|-----|------------|-------|------------|------------|----|----|----|
| 10 | o  | 9.493 8513 | 642 | 9.516 0575 | 711   | 0.483 9425 | 9.977 7938 | 69 | o  | 50 |
|    | 10 | 9.493 9155 | 641 | 9.516 1286 | 710   | 0.483 8714 | 9.977 7869 | 69 | 50 |    |
|    | 20 | 9.493 9796 | 642 | 9.516 1996 | 711   | 0.483 8004 | 9.977 7800 | 69 | 40 |    |
|    | 30 | 9.494 0438 | 641 | 9.516 2707 | 710   | 0.483 7293 | 9.977 7731 | 69 | 30 |    |
|    | 40 | 9.494 1079 | 641 | 9.516 3417 | 710   | 0.483 6583 | 9.977 7662 | 69 | 20 |    |
|    | 50 | 9.494 1720 | 641 | 9.516 4127 | 711   | 0.483 5873 | 9.977 7593 | 69 | 10 |    |
| 11 | o  | 9.494 2361 | 641 | 9.516 4838 | 710   | 0.483 5162 | 9.977 7523 | 70 | o  | 49 |
|    | 10 | 9.494 3002 | 641 | 9.516 5548 | 710   | 0.483 4452 | 9.977 7454 | 69 | 50 |    |
|    | 20 | 9.494 3643 | 641 | 9.516 6258 | 710   | 0.483 3742 | 9.977 7385 | 69 | 40 |    |
|    | 30 | 9.494 4284 | 640 | 9.516 6968 | 710   | 0.483 3032 | 9.977 7316 | 69 | 30 |    |
|    | 40 | 9.494 4924 | 641 | 9.516 7678 | 709   | 0.483 2322 | 9.977 7247 | 69 | 20 |    |
|    | 50 | 9.494 5565 | 640 | 9.516 8387 | 710   | 0.483 1613 | 9.977 7178 | 69 | 10 |    |
| 12 | o  | 9.494 6205 | 641 | 9.516 9097 | 710   | 0.483 0903 | 9.977 7108 | 70 | o  | 48 |
|    | 10 | 9.494 6846 | 640 | 9.516 9807 | 709   | 0.483 0193 | 9.977 7039 | 69 | 50 |    |
|    | 20 | 9.494 7486 | 640 | 9.517 0516 | 710   | 0.482 9484 | 9.977 6970 | 69 | 40 |    |
|    | 30 | 9.494 8126 | 640 | 9.517 1226 | 709   | 0.482 8774 | 9.977 6901 | 69 | 30 |    |
|    | 40 | 9.494 8766 | 640 | 9.517 1935 | 709   | 0.482 8065 | 9.977 6831 | 69 | 20 |    |
|    | 50 | 9.494 9406 | 640 | 9.517 2644 | 709   | 0.482 7356 | 9.977 6762 | 69 | 10 |    |
| 13 | o  | 9.495 0046 | 640 | 9.517 3353 | 709   | 0.482 6647 | 9.977 6693 | 70 | o  | 47 |
|    | 10 | 9.495 0686 | 639 | 9.517 4062 | 709   | 0.482 5938 | 9.977 6623 | 69 | 50 |    |
|    | 20 | 9.495 1325 | 640 | 9.517 4771 | 709   | 0.482 5229 | 9.977 6554 | 69 | 40 |    |
|    | 30 | 9.495 1965 | 639 | 9.517 5480 | 709   | 0.482 4520 | 9.977 6485 | 69 | 30 |    |
|    | 40 | 9.495 2604 | 639 | 9.517 6189 | 708   | 0.482 3811 | 9.977 6415 | 69 | 20 |    |
|    | 50 | 9.495 3243 | 640 | 9.517 6897 | 709   | 0.482 3103 | 9.977 6346 | 69 | 10 |    |
| 14 | o  | 9.495 3883 | 639 | 9.517 7606 | 708   | 0.482 2394 | 9.977 6277 | 70 | o  | 46 |
|    | 10 | 9.495 4522 | 639 | 9.517 8314 | 709   | 0.482 1686 | 9.977 6207 | 69 | 50 |    |
|    | 20 | 9.495 5161 | 639 | 9.517 9023 | 708   | 0.482 0977 | 9.977 6138 | 69 | 40 |    |
|    | 30 | 9.495 5800 | 638 | 9.517 9731 | 708   | 0.482 0269 | 9.977 6069 | 69 | 30 |    |
|    | 40 | 9.495 6438 | 639 | 9.518 0439 | 708   | 0.481 9561 | 9.977 5999 | 69 | 20 |    |
|    | 50 | 9.495 7077 | 639 | 9.518 1147 | 708   | 0.481 8853 | 9.977 5930 | 70 | 10 |    |
| 15 | o  | 9.495 7716 | 638 | 9.518 1855 | 708   | 0.481 8145 | 9.977 5860 | 69 | o  | 45 |
|    | 10 | 9.495 8354 | 638 | 9.518 2563 | 708   | 0.481 7437 | 9.977 5791 | 69 | 50 |    |
|    | 20 | 9.495 8992 | 639 | 9.518 3271 | 708   | 0.481 6729 | 9.977 5722 | 69 | 40 |    |
|    | 30 | 9.495 9631 | 638 | 9.518 3979 | 707   | 0.481 6021 | 9.977 5652 | 69 | 30 |    |
|    | 40 | 9.496 0269 | 638 | 9.518 4686 | 708   | 0.481 5314 | 9.977 5583 | 70 | 20 |    |
|    | 50 | 9.496 0907 | 638 | 9.518 5394 | 707   | 0.481 4606 | 9.977 5513 | 69 | 10 |    |
| 16 | o  | 9.496 1545 | 638 | 9.518 6101 | 708   | 0.481 3899 | 9.977 5444 | 70 | o  | 44 |
|    | 10 | 9.496 2183 | 637 | 9.518 6809 | 707   | 0.481 3191 | 9.977 5374 | 69 | 50 |    |
|    | 20 | 9.496 2820 | 638 | 9.518 7516 | 707   | 0.481 2484 | 9.977 5305 | 69 | 40 |    |
|    | 30 | 9.496 3458 | 638 | 9.518 8223 | 707   | 0.481 1777 | 9.977 5235 | 69 | 30 |    |
|    | 40 | 9.496 4096 | 637 | 9.518 8930 | 707   | 0.481 1070 | 9.977 5166 | 69 | 20 |    |
|    | 50 | 9.496 4733 | 637 | 9.518 9637 | 707   | 0.481 0363 | 9.977 5096 | 70 | 10 |    |
| 17 | o  | 9.496 5370 | 638 | 9.519 0344 | 707   | 0.480 9656 | 9.977 5026 | 69 | o  | 43 |
|    | 10 | 9.496 6008 | 637 | 9.519 1051 | 706   | 0.480 8949 | 9.977 4957 | 70 | 50 |    |
|    | 20 | 9.496 6645 | 637 | 9.519 1757 | 707   | 0.480 8243 | 9.977 4887 | 69 | 40 |    |
|    | 30 | 9.496 7282 | 637 | 9.519 2464 | 707   | 0.480 7536 | 9.977 4818 | 70 | 30 |    |
|    | 40 | 9.496 7919 | 636 | 9.519 3171 | 706   | 0.480 6829 | 9.977 4748 | 69 | 20 |    |
|    | 50 | 9.496 8555 | 637 | 9.519 3877 | 706   | 0.480 6123 | 9.977 4678 | 69 | 10 |    |
| 18 | o  | 9.496 9192 | 637 | 9.519 4583 | 707   | 0.480 5417 | 9.977 4609 | 70 | o  | 42 |
|    | 10 | 9.496 9829 | 636 | 9.519 5290 | 706   | 0.480 4710 | 9.977 4539 | 69 | 50 |    |
|    | 20 | 9.497 0465 | 637 | 9.519 5996 | 706   | 0.480 4004 | 9.977 4470 | 70 | 40 |    |
|    | 30 | 9.497 1102 | 636 | 9.519 6702 | 706   | 0.480 3298 | 9.977 4400 | 70 | 30 |    |
|    | 40 | 9.497 1738 | 636 | 9.519 7408 | 706   | 0.480 2592 | 9.977 4330 | 69 | 20 |    |
|    | 50 | 9.497 2374 | 636 | 9.519 8114 | 705   | 0.480 1886 | 9.977 4261 | 70 | 10 |    |
| 19 | o  | 9.497 3010 | 636 | 9.519 8819 | 706   | 0.480 1181 | 9.977 4191 | 70 | o  | 41 |
|    | 10 | 9.497 3646 | 636 | 9.519 9525 | 706   | 0.480 0475 | 9.977 4121 | 70 | 50 |    |
|    | 20 | 9.497 4282 | 636 | 9.520 0231 | 705   | 0.479 9769 | 9.977 4051 | 69 | 40 |    |
|    | 30 | 9.497 4918 | 635 | 9.520 0936 | 706   | 0.479 9064 | 9.977 3982 | 70 | 30 |    |
|    | 40 | 9.497 5553 | 636 | 9.520 1642 | 705   | 0.479 8358 | 9.977 3912 | 70 | 20 |    |
|    | 50 | 9.497 6189 | 635 | 9.520 2347 | 705   | 0.479 7653 | 9.977 3842 | 70 | 10 |    |
| 20 | o  | 9.497 6824 | 635 | 9.520 3052 | 705   | 0.479 6948 | 9.977 3772 | 70 | o  | 40 |
|    |    |            |     |            |       |            |            |    |    |    |
|    | "  | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d. | "  |    |

708

1 70.8

2 141.6

3 212.4

4 283.2

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705

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641

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4 256.4

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6 384.6

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8 512.8

9 576.9

638

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2 127.6

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4 255.5

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9 63.0

|    | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d. | "  |    |
|----|----|------------|-----|------------|-------|------------|------------|----|----|----|
| 20 | 0  | 9.497 6824 | 636 | 9.520 3052 | 705   | 0.479 6948 | 9.977 3772 | 69 | 0  | 40 |
|    | 10 | 9.497 7460 | 635 | 9.520 3757 | 705   | 0.479 6243 | 9.977 3703 | 70 | 50 |    |
|    | 20 | 9.497 8095 | 635 | 9.520 4462 | 705   | 0.479 5538 | 9.977 3633 | 70 | 40 |    |
|    | 30 | 9.497 8730 | 635 | 9.520 5167 | 705   | 0.479 4833 | 9.977 3563 | 70 | 30 |    |
|    | 40 | 9.497 9365 | 635 | 9.520 5872 | 705   | 0.479 4128 | 9.977 3493 | 70 | 20 |    |
|    | 50 | 9.498 0000 | 635 | 9.520 6577 | 705   | 0.479 3423 | 9.977 3423 | 69 | 10 |    |
| 21 | 0  | 9.498 0635 | 635 | 9.520 7282 | 704   | 0.479 2718 | 9.977 3354 | 70 | 0  | 39 |
|    | 10 | 9.498 1270 | 634 | 9.520 7986 | 705   | 0.479 2014 | 9.977 3284 | 70 | 50 |    |
|    | 20 | 9.498 1904 | 635 | 9.520 8691 | 704   | 0.479 1309 | 9.977 3214 | 70 | 40 |    |
|    | 30 | 9.498 2539 | 634 | 9.520 9395 | 704   | 0.479 0605 | 9.977 3144 | 70 | 30 |    |
|    | 40 | 9.498 3173 | 634 | 9.521 0099 | 705   | 0.478 9901 | 9.977 3074 | 70 | 20 |    |
|    | 50 | 9.498 3808 | 634 | 9.521 0804 | 704   | 0.478 9196 | 9.977 3004 | 70 | 10 |    |
| 22 | 0  | 9.498 4442 | 634 | 9.521 1508 | 704   | 0.478 8492 | 9.977 2934 | 70 | 0  | 38 |
|    | 10 | 9.498 5076 | 634 | 9.521 2212 | 704   | 0.478 7788 | 9.977 2864 | 69 | 50 |    |
|    | 20 | 9.498 5710 | 634 | 9.521 2916 | 703   | 0.478 7084 | 9.977 2795 | 70 | 40 |    |
|    | 30 | 9.498 6344 | 634 | 9.521 3619 | 704   | 0.478 6381 | 9.977 2725 | 70 | 30 |    |
|    | 40 | 9.498 6978 | 634 | 9.521 4323 | 704   | 0.478 5677 | 9.977 2655 | 70 | 20 |    |
|    | 50 | 9.498 7612 | 633 | 9.521 5027 | 703   | 0.478 4973 | 9.977 2585 | 70 | 10 |    |
| 23 | 0  | 9.498 8245 | 634 | 9.521 5730 | 704   | 0.478 4270 | 9.977 2515 | 70 | 0  | 37 |
|    | 10 | 9.498 8879 | 633 | 9.521 6434 | 703   | 0.478 3566 | 9.977 2445 | 70 | 50 |    |
|    | 20 | 9.498 9512 | 633 | 9.521 7137 | 704   | 0.478 2863 | 9.977 2375 | 70 | 40 |    |
|    | 30 | 9.499 0145 | 634 | 9.521 7841 | 703   | 0.478 2159 | 9.977 2305 | 70 | 30 |    |
|    | 40 | 9.499 0779 | 633 | 9.521 8544 | 703   | 0.478 1456 | 9.977 2235 | 70 | 20 |    |
|    | 50 | 9.499 1412 | 633 | 9.521 9247 | 703   | 0.478 0753 | 9.977 2165 | 70 | 10 |    |
| 24 | 0  | 9.499 2045 | 633 | 9.521 9950 | 703   | 0.478 0050 | 9.977 2095 | 70 | 0  | 36 |
|    | 10 | 9.499 2678 | 632 | 9.522 0653 | 703   | 0.477 9347 | 9.977 2025 | 70 | 50 |    |
|    | 20 | 9.499 3310 | 633 | 9.522 1356 | 703   | 0.477 8644 | 9.977 1955 | 71 | 40 |    |
|    | 30 | 9.499 3943 | 633 | 9.522 2059 | 702   | 0.477 7941 | 9.977 1884 | 70 | 30 |    |
|    | 40 | 9.499 4576 | 632 | 9.522 2761 | 703   | 0.477 7239 | 9.977 1814 | 70 | 20 |    |
|    | 50 | 9.499 5208 | 632 | 9.522 3464 | 702   | 0.477 6536 | 9.977 1744 | 70 | 10 |    |
| 25 | 0  | 9.499 5840 | 633 | 9.522 4166 | 703   | 0.477 5834 | 9.977 1674 | 70 | 0  | 35 |
|    | 10 | 9.499 6473 | 632 | 9.522 4869 | 702   | 0.477 5131 | 9.977 1604 | 70 | 50 |    |
|    | 20 | 9.499 7105 | 632 | 9.522 5571 | 702   | 0.477 4429 | 9.977 1534 | 70 | 40 |    |
|    | 30 | 9.499 7737 | 632 | 9.522 6273 | 702   | 0.477 3727 | 9.977 1464 | 70 | 30 |    |
|    | 40 | 9.499 8369 | 632 | 9.522 6975 | 702   | 0.477 3025 | 9.977 1394 | 70 | 20 |    |
|    | 50 | 9.499 9001 | 632 | 9.522 7677 | 702   | 0.477 2323 | 9.977 1324 | 71 | 10 |    |
| 26 | 0  | 9.499 9633 | 631 | 9.522 8379 | 702   | 0.477 1621 | 9.977 1253 | 70 | 0  | 34 |
|    | 10 | 9.500 0264 | 632 | 9.522 9081 | 702   | 0.477 0919 | 9.977 1183 | 70 | 50 |    |
|    | 20 | 9.500 0896 | 631 | 9.522 9783 | 702   | 0.477 0217 | 9.977 1113 | 70 | 40 |    |
|    | 30 | 9.500 1527 | 632 | 9.523 0485 | 701   | 0.476 9515 | 9.977 1043 | 70 | 30 |    |
|    | 40 | 9.500 2159 | 631 | 9.523 1186 | 702   | 0.476 8814 | 9.977 0973 | 71 | 20 |    |
|    | 50 | 9.500 2790 | 631 | 9.523 1888 | 701   | 0.476 8112 | 9.977 0902 | 70 | 10 |    |
| 27 | 0  | 9.500 3421 | 631 | 9.523 2589 | 701   | 0.476 7411 | 9.977 0832 | 70 | 0  | 33 |
|    | 10 | 9.500 4052 | 631 | 9.523 3290 | 702   | 0.476 6710 | 9.977 0762 | 70 | 50 |    |
|    | 20 | 9.500 4683 | 631 | 9.523 3992 | 701   | 0.476 6008 | 9.977 0692 | 71 | 40 |    |
|    | 30 | 9.500 5314 | 631 | 9.523 4693 | 701   | 0.476 5307 | 9.977 0621 | 70 | 30 |    |
|    | 40 | 9.500 5945 | 630 | 9.523 5394 | 701   | 0.476 4606 | 9.977 0551 | 70 | 20 |    |
|    | 50 | 9.500 6575 | 631 | 9.523 6095 | 700   | 0.476 3905 | 9.977 0481 | 71 | 10 |    |
| 28 | 0  | 9.500 7206 | 630 | 9.523 6795 | 701   | 0.476 3205 | 9.977 0410 | 70 | 0  | 32 |
|    | 10 | 9.500 7836 | 631 | 9.523 7496 | 701   | 0.476 2504 | 9.977 0340 | 70 | 50 |    |
|    | 20 | 9.500 8467 | 630 | 9.523 8197 | 700   | 0.476 1803 | 9.977 0270 | 71 | 40 |    |
|    | 30 | 9.500 9097 | 630 | 9.523 8898 | 701   | 0.476 1103 | 9.977 0199 | 70 | 30 |    |
|    | 40 | 9.500 9727 | 630 | 9.523 9598 | 700   | 0.476 0402 | 9.977 0129 | 70 | 20 |    |
|    | 50 | 9.501 0357 | 630 | 9.524 0298 | 701   | 0.475 9702 | 9.977 0059 | 71 | 10 |    |
| 29 | 0  | 9.501 0987 | 630 | 9.524 0999 | 700   | 0.475 9001 | 9.976 9988 | 70 | 0  | 31 |
|    | 10 | 9.501 1617 | 630 | 9.524 1699 | 700   | 0.475 8301 | 9.976 9918 | 70 | 50 |    |
|    | 20 | 9.501 2247 | 629 | 9.524 2399 | 700   | 0.475 7601 | 9.976 9848 | 71 | 40 |    |
|    | 30 | 9.501 2876 | 630 | 9.524 3099 | 700   | 0.475 6901 | 9.976 9777 | 70 | 30 |    |
|    | 40 | 9.501 3506 | 629 | 9.524 3799 | 700   | 0.475 6201 | 9.976 9707 | 70 | 20 |    |
|    | 50 | 9.501 4135 | 629 | 9.524 4499 | 700   | 0.475 5501 | 9.976 9636 | 71 | 10 |    |
| 30 | 0  | 9.501 4764 |     | 9.524 5199 |       | 0.475 4801 | 9.976 9566 | 70 | 0  | 30 |
|    | "  | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d. | "  |    |



|    | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Coa        | d. | "  |    |
|----|----|------------|-----|------------|-------|------------|------------|----|----|----|
| 30 | 0  | 9.501 4764 | 630 | 9.524 5199 | 699   | 0.475 4801 | 9.976 9566 | 71 | 0  | 30 |
|    | 10 | 9.501 5394 | 629 | 9.524 5898 | 700   | 0.475 4102 | 9.976 9495 | 70 | 50 |    |
|    | 20 | 9.501 6023 | 629 | 9.524 6598 | 699   | 0.475 3402 | 9.976 9425 | 70 | 40 |    |
|    | 30 | 9.501 6652 | 629 | 9.524 7297 | 700   | 0.475 2703 | 9.976 9354 | 70 | 30 |    |
|    | 40 | 9.501 7281 | 629 | 9.524 7997 | 699   | 0.475 2003 | 9.976 9284 | 71 | 20 |    |
|    | 50 | 9.501 7910 | 628 | 9.524 8696 | 699   | 0.475 1304 | 9.976 9213 | 71 | 10 |    |
| 31 | 0  | 9.501 8538 | 629 | 9.524 9395 | 699   | 0.475 0605 | 9.976 9143 | 71 | 0  | 29 |
|    | 10 | 9.501 9167 | 628 | 9.525 0094 | 700   | 0.474 9906 | 9.976 9072 | 70 | 50 |    |
|    | 20 | 9.501 9795 | 629 | 9.525 0794 | 698   | 0.474 9206 | 9.976 9002 | 71 | 40 |    |
|    | 30 | 9.502 0424 | 628 | 9.525 1492 | 699   | 0.474 8508 | 9.976 8931 | 70 | 30 |    |
|    | 40 | 9.502 1052 | 628 | 9.525 2191 | 699   | 0.474 7809 | 9.976 8861 | 71 | 20 |    |
|    | 50 | 9.502 1680 | 628 | 9.525 2890 | 699   | 0.474 7110 | 9.976 8790 | 70 | 10 |    |
| 32 | 0  | 9.502 2308 | 628 | 9.525 3589 | 698   | 0.474 6411 | 9.976 8720 | 71 | 0  | 28 |
|    | 10 | 9.502 2936 | 628 | 9.525 4287 | 699   | 0.474 5713 | 9.976 8649 | 71 | 50 |    |
|    | 20 | 9.502 3564 | 628 | 9.525 4986 | 698   | 0.474 5014 | 9.976 8578 | 70 | 40 |    |
|    | 30 | 9.502 4192 | 628 | 9.525 5684 | 699   | 0.474 4316 | 9.976 8508 | 71 | 30 |    |
|    | 40 | 9.502 4820 | 627 | 9.525 6383 | 698   | 0.474 3617 | 9.976 8437 | 70 | 20 |    |
|    | 50 | 9.502 5447 | 628 | 9.525 7081 | 698   | 0.474 2919 | 9.976 8367 | 71 | 10 |    |
| 33 | 0  | 9.502 6075 | 627 | 9.525 7779 | 698   | 0.474 2221 | 9.976 8296 | 71 | 0  | 27 |
|    | 10 | 9.502 6702 | 628 | 9.525 8477 | 698   | 0.474 1523 | 9.976 8225 | 70 | 50 |    |
|    | 20 | 9.502 7330 | 627 | 9.525 9175 | 698   | 0.474 0825 | 9.976 8155 | 71 | 40 |    |
|    | 30 | 9.502 7957 | 627 | 9.525 9873 | 698   | 0.474 0127 | 9.976 8084 | 71 | 30 |    |
|    | 40 | 9.502 8584 | 627 | 9.526 0571 | 697   | 0.473 9429 | 9.976 8013 | 71 | 20 |    |
|    | 50 | 9.502 9211 | 627 | 9.526 1268 | 698   | 0.473 8732 | 9.976 7942 | 70 | 10 |    |
| 34 | 0  | 9.502 9838 | 627 | 9.526 1966 | 698   | 0.473 8034 | 9.976 7872 | 71 | 0  | 26 |
|    | 10 | 9.503 0465 | 626 | 9.526 2664 | 697   | 0.473 7336 | 9.976 7801 | 71 | 50 |    |
|    | 20 | 9.503 1091 | 627 | 9.526 3361 | 697   | 0.473 6639 | 9.976 7730 | 70 | 40 |    |
|    | 30 | 9.503 1718 | 626 | 9.526 4058 | 698   | 0.473 5942 | 9.976 7660 | 71 | 30 |    |
|    | 40 | 9.503 2344 | 627 | 9.526 4756 | 697   | 0.473 5244 | 9.976 7589 | 71 | 20 |    |
|    | 50 | 9.503 2971 | 626 | 9.526 5453 | 697   | 0.473 4547 | 9.976 7518 | 71 | 10 |    |
| 35 | 0  | 9.503 3597 | 626 | 9.526 6150 | 697   | 0.473 3850 | 9.976 7447 | 71 | 0  | 25 |
|    | 10 | 9.503 4223 | 626 | 9.526 6847 | 697   | 0.473 3153 | 9.976 7376 | 70 | 50 |    |
|    | 20 | 9.503 4849 | 626 | 9.526 7544 | 697   | 0.473 2456 | 9.976 7306 | 71 | 40 |    |
|    | 30 | 9.503 5475 | 626 | 9.526 8241 | 696   | 0.473 1759 | 9.976 7235 | 71 | 30 |    |
|    | 40 | 9.503 6101 | 626 | 9.526 8937 | 697   | 0.473 1063 | 9.976 7164 | 71 | 20 |    |
|    | 50 | 9.503 6727 | 626 | 9.526 9634 | 697   | 0.473 0366 | 9.976 7093 | 71 | 10 |    |
| 36 | 0  | 9.503 7353 | 625 | 9.527 0331 | 696   | 0.472 9669 | 9.976 7022 | 71 | 0  | 24 |
|    | 10 | 9.503 7978 | 626 | 9.527 1027 | 696   | 0.472 8973 | 9.976 6951 | 70 | 50 |    |
|    | 20 | 9.503 8604 | 625 | 9.527 1723 | 697   | 0.472 8277 | 9.976 6881 | 71 | 40 |    |
|    | 30 | 9.503 9229 | 626 | 9.527 2420 | 696   | 0.472 7580 | 9.976 6810 | 71 | 30 |    |
|    | 40 | 9.503 9855 | 625 | 9.527 3116 | 696   | 0.472 6884 | 9.976 6739 | 71 | 20 |    |
|    | 50 | 9.504 0480 | 625 | 9.527 3812 | 696   | 0.472 6188 | 9.976 6668 | 71 | 10 |    |
| 37 | 0  | 9.504 1105 | 625 | 9.527 4508 | 696   | 0.472 5492 | 9.976 6597 | 71 | 0  | 23 |
|    | 10 | 9.504 1730 | 625 | 9.527 5204 | 696   | 0.472 4796 | 9.976 6526 | 71 | 50 |    |
|    | 20 | 9.504 2355 | 625 | 9.527 5900 | 695   | 0.472 4100 | 9.976 6455 | 71 | 40 |    |
|    | 30 | 9.504 2980 | 624 | 9.527 6595 | 696   | 0.472 3405 | 9.976 6384 | 71 | 30 |    |
|    | 40 | 9.504 3604 | 625 | 9.527 7291 | 696   | 0.472 2709 | 9.976 6313 | 71 | 20 |    |
|    | 50 | 9.504 4229 | 624 | 9.527 7987 | 695   | 0.472 2013 | 9.976 6242 | 71 | 10 |    |
| 38 | 0  | 9.504 4853 | 625 | 9.527 8682 | 696   | 0.472 1318 | 9.976 6171 | 71 | 0  | 22 |
|    | 10 | 9.504 5478 | 624 | 9.527 9378 | 695   | 0.472 0622 | 9.976 6100 | 71 | 50 |    |
|    | 20 | 9.504 6102 | 624 | 9.528 0073 | 695   | 0.471 9927 | 9.976 6029 | 71 | 40 |    |
|    | 30 | 9.504 6726 | 624 | 9.528 0768 | 695   | 0.471 9232 | 9.976 5958 | 71 | 30 |    |
|    | 40 | 9.504 7350 | 624 | 9.528 1463 | 695   | 0.471 8537 | 9.976 5887 | 71 | 20 |    |
|    | 50 | 9.504 7974 | 624 | 9.528 2158 | 695   | 0.471 7842 | 9.976 5816 | 71 | 10 |    |
| 39 | 0  | 9.504 8598 | 624 | 9.528 2853 | 695   | 0.471 7147 | 9.976 5745 | 71 | 0  | 21 |
|    | 10 | 9.504 9222 | 624 | 9.528 3548 | 695   | 0.471 6452 | 9.976 5674 | 71 | 50 |    |
|    | 20 | 9.504 9846 | 623 | 9.528 4243 | 694   | 0.471 5757 | 9.976 5603 | 71 | 40 |    |
|    | 30 | 9.505 0469 | 624 | 9.528 4937 | 695   | 0.471 5063 | 9.976 5532 | 71 | 30 |    |
|    | 40 | 9.505 1093 | 623 | 9.528 5632 | 695   | 0.471 4368 | 9.976 5461 | 71 | 20 |    |
|    | 50 | 9.505 1716 | 623 | 9.528 6327 | 694   | 0.471 3673 | 9.976 5390 | 71 | 10 |    |
| 40 | 0  | 9.505 2339 | 623 | 9.528 7021 | 694   | 0.471 2979 | 9.976 5318 | 72 | 0  | 20 |
|    |    | Coa        | d.  | Cotg       | d. c. | Tang       | Sin        | d. | "  |    |

699

1 69.9

2 139.8

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|                   | a  | Bin        | d.  | Tang       | d.c. | Cotg       | Cos        | d. | a  |    |
|-------------------|----|------------|-----|------------|------|------------|------------|----|----|----|
| 604               | 0  | 9.505 3319 | 631 | 9.528 7631 | 631  | 9.541 1969 | 9.553 6281 | 71 | 0  | 20 |
| 1 604.9           | 10 | 9.505 2963 | 631 | 9.528 7275 | 631  | 9.541 1613 | 9.553 5925 | 71 | 5  |    |
| 11 604.8          | 20 | 9.505 2606 | 631 | 9.528 6918 | 631  | 9.541 1256 | 9.553 5568 | 71 | 10 |    |
| 111 604.8         | 30 | 9.505 2250 | 631 | 9.528 6562 | 631  | 9.541 0900 | 9.553 5211 | 71 | 15 |    |
| 1111 604.6        | 40 | 9.505 1893 | 631 | 9.528 6205 | 631  | 9.541 0543 | 9.553 4854 | 71 | 20 |    |
| 11111 604.6       | 50 | 9.505 1536 | 631 | 9.528 5848 | 631  | 9.541 0186 | 9.553 4497 | 71 | 25 |    |
| 111111 604.6      | 0  | 9.505 1179 | 631 | 9.528 5491 | 631  | 9.540 9829 | 9.553 4140 | 71 | 30 |    |
| 1111111 604.6     | 10 | 9.505 0822 | 631 | 9.528 5134 | 631  | 9.540 9472 | 9.553 3783 | 71 | 35 |    |
| 11111111 604.6    | 20 | 9.505 0465 | 631 | 9.528 4777 | 631  | 9.540 9115 | 9.553 3426 | 71 | 40 |    |
| 111111111 604.6   | 30 | 9.505 0108 | 631 | 9.528 4420 | 631  | 9.540 8758 | 9.553 3069 | 71 | 45 |    |
| 1111111111 604.6  | 40 | 9.504 9751 | 631 | 9.528 4063 | 631  | 9.540 8401 | 9.553 2712 | 71 | 50 |    |
| 11111111111 604.6 | 50 | 9.504 9394 | 631 | 9.528 3706 | 631  | 9.540 8044 | 9.553 2355 | 71 | 55 |    |
| 603               | 0  | 9.505 9311 | 631 | 9.529 3623 | 631  | 9.541 7960 | 9.554 2271 | 71 | 0  | 18 |
| 1 603.9           | 10 | 9.505 8954 | 631 | 9.529 3266 | 631  | 9.541 7603 | 9.554 1914 | 71 | 5  |    |
| 11 603.8          | 20 | 9.505 8597 | 631 | 9.529 2909 | 631  | 9.541 7246 | 9.554 1557 | 71 | 10 |    |
| 111 603.8         | 30 | 9.505 8240 | 631 | 9.529 2552 | 631  | 9.541 6889 | 9.554 1200 | 71 | 15 |    |
| 1111 603.6        | 40 | 9.505 7883 | 631 | 9.529 2195 | 631  | 9.541 6532 | 9.554 0843 | 71 | 20 |    |
| 11111 603.6       | 50 | 9.505 7526 | 631 | 9.529 1838 | 631  | 9.541 6175 | 9.554 0486 | 71 | 25 |    |
| 111111 603.6      | 0  | 9.505 7169 | 631 | 9.529 1481 | 631  | 9.541 5818 | 9.554 0129 | 71 | 30 |    |
| 1111111 603.6     | 10 | 9.505 6812 | 631 | 9.529 1124 | 631  | 9.541 5461 | 9.553 9772 | 71 | 35 |    |
| 11111111 603.6    | 20 | 9.505 6455 | 631 | 9.529 0767 | 631  | 9.541 5104 | 9.553 9415 | 71 | 40 |    |
| 111111111 603.6   | 30 | 9.505 6098 | 631 | 9.529 0410 | 631  | 9.541 4747 | 9.553 9058 | 71 | 45 |    |
| 1111111111 603.6  | 40 | 9.505 5741 | 631 | 9.529 0053 | 631  | 9.541 4390 | 9.553 8701 | 71 | 50 |    |
| 11111111111 603.6 | 50 | 9.505 5384 | 631 | 9.528 9696 | 631  | 9.541 4033 | 9.553 8344 | 71 | 55 |    |
| 602               | 0  | 9.506 5314 | 631 | 9.529 9624 | 631  | 9.542 3961 | 9.554 8271 | 71 | 0  | 17 |
| 1 602.9           | 10 | 9.506 4957 | 631 | 9.529 9267 | 631  | 9.542 3604 | 9.554 7914 | 71 | 5  |    |
| 11 602.8          | 20 | 9.506 4600 | 631 | 9.529 8910 | 631  | 9.542 3247 | 9.554 7557 | 71 | 10 |    |
| 111 602.8         | 30 | 9.506 4243 | 631 | 9.529 8553 | 631  | 9.542 2890 | 9.554 7200 | 71 | 15 |    |
| 1111 602.6        | 40 | 9.506 3886 | 631 | 9.529 8196 | 631  | 9.542 2533 | 9.554 6843 | 71 | 20 |    |
| 11111 602.6       | 50 | 9.506 3529 | 631 | 9.529 7839 | 631  | 9.542 2176 | 9.554 6486 | 71 | 25 |    |
| 111111 602.6      | 0  | 9.506 3172 | 631 | 9.529 7482 | 631  | 9.542 1819 | 9.554 6129 | 71 | 30 |    |
| 1111111 602.6     | 10 | 9.506 2815 | 631 | 9.529 7125 | 631  | 9.542 1462 | 9.554 5772 | 71 | 35 |    |
| 11111111 602.6    | 20 | 9.506 2458 | 631 | 9.529 6768 | 631  | 9.542 1105 | 9.554 5415 | 71 | 40 |    |
| 111111111 602.6   | 30 | 9.506 2101 | 631 | 9.529 6411 | 631  | 9.542 0748 | 9.554 5058 | 71 | 45 |    |
| 1111111111 602.6  | 40 | 9.506 1744 | 631 | 9.529 6054 | 631  | 9.542 0391 | 9.554 4701 | 71 | 50 |    |
| 11111111111 602.6 | 50 | 9.506 1387 | 631 | 9.529 5697 | 631  | 9.542 0034 | 9.554 4344 | 71 | 55 |    |
| 601               | 0  | 9.507 5314 | 631 | 9.530 9624 | 631  | 9.543 3961 | 9.555 8271 | 71 | 0  | 16 |
| 1 601.9           | 10 | 9.507 4957 | 631 | 9.530 9267 | 631  | 9.543 3604 | 9.555 7914 | 71 | 5  |    |
| 11 601.8          | 20 | 9.507 4600 | 631 | 9.530 8910 | 631  | 9.543 3247 | 9.555 7557 | 71 | 10 |    |
| 111 601.8         | 30 | 9.507 4243 | 631 | 9.530 8553 | 631  | 9.543 2890 | 9.555 7200 | 71 | 15 |    |
| 1111 601.6        | 40 | 9.507 3886 | 631 | 9.530 8196 | 631  | 9.543 2533 | 9.555 6843 | 71 | 20 |    |
| 11111 601.6       | 50 | 9.507 3529 | 631 | 9.530 7839 | 631  | 9.543 2176 | 9.555 6486 | 71 | 25 |    |
| 111111 601.6      | 0  | 9.507 3172 | 631 | 9.530 7482 | 631  | 9.543 1819 | 9.555 6129 | 71 | 30 |    |
| 1111111 601.6     | 10 | 9.507 2815 | 631 | 9.530 7125 | 631  | 9.543 1462 | 9.555 5772 | 71 | 35 |    |
| 11111111 601.6    | 20 | 9.507 2458 | 631 | 9.530 6768 | 631  | 9.543 1105 | 9.555 5415 | 71 | 40 |    |
| 111111111 601.6   | 30 | 9.507 2101 | 631 | 9.530 6411 | 631  | 9.543 0748 | 9.555 5058 | 71 | 45 |    |
| 1111111111 601.6  | 40 | 9.507 1744 | 631 | 9.530 6054 | 631  | 9.543 0391 | 9.555 4701 | 71 | 50 |    |
| 11111111111 601.6 | 50 | 9.507 1387 | 631 | 9.530 5697 | 631  | 9.543 0034 | 9.555 4344 | 71 | 55 |    |
| 600               | 0  | 9.508 5314 | 631 | 9.531 9624 | 631  | 9.544 3961 | 9.556 8271 | 71 | 0  | 15 |
| 1 600.9           | 10 | 9.508 4957 | 631 | 9.531 9267 | 631  | 9.544 3604 | 9.556 7914 | 71 | 5  |    |
| 11 600.8          | 20 | 9.508 4600 | 631 | 9.531 8910 | 631  | 9.544 3247 | 9.556 7557 | 71 | 10 |    |
| 111 600.8         | 30 | 9.508 4243 | 631 | 9.531 8553 | 631  | 9.544 2890 | 9.556 7200 | 71 | 15 |    |
| 1111 600.6        | 40 | 9.508 3886 | 631 | 9.531 8196 | 631  | 9.544 2533 | 9.556 6843 | 71 | 20 |    |
| 11111 600.6       | 50 | 9.508 3529 | 631 | 9.531 7839 | 631  | 9.544 2176 | 9.556 6486 | 71 | 25 |    |
| 111111 600.6      | 0  | 9.508 3172 | 631 | 9.531 7482 | 631  | 9.544 1819 | 9.556 6129 | 71 | 30 |    |
| 1111111 600.6     | 10 | 9.508 2815 | 631 | 9.531 7125 | 631  | 9.544 1462 | 9.556 5772 | 71 | 35 |    |
| 11111111 600.6    | 20 | 9.508 2458 | 631 | 9.531 6768 | 631  | 9.544 1105 | 9.556 5415 | 71 | 40 |    |
| 111111111 600.6   | 30 | 9.508 2101 | 631 | 9.531 6411 | 631  | 9.544 0748 | 9.556 5058 | 71 | 45 |    |
| 1111111111 600.6  | 40 | 9.508 1744 | 631 | 9.531 6054 | 631  | 9.544 0391 | 9.556 4701 | 71 | 50 |    |
| 11111111111 600.6 | 50 | 9.508 1387 | 631 | 9.531 5697 | 631  | 9.544 0034 | 9.556 4344 | 71 | 55 |    |
| 599               | 0  | 9.509 5314 | 631 | 9.532 9624 | 631  | 9.545 3961 | 9.557 8271 | 71 | 0  | 14 |
| 1 599.9           | 10 | 9.509 4957 | 631 | 9.532 9267 | 631  | 9.545 3604 | 9.557 7914 | 71 | 5  |    |
| 11 599.8          | 20 | 9.509 4600 | 631 | 9.532 8910 | 631  | 9.545 3247 | 9.557 7557 | 71 | 10 |    |
| 111 599.8         | 30 | 9.509 4243 | 631 | 9.532 8553 | 631  | 9.545 2890 | 9.557 7200 | 71 | 15 |    |
| 1111 599.6        | 40 | 9.509 3886 | 631 | 9.532 8196 | 631  | 9.545 2533 | 9.557 6843 | 71 | 20 |    |
| 11111 599.6       | 50 | 9.509 3529 | 631 | 9.532 7839 | 631  | 9.545 2176 | 9.557 6486 | 71 | 25 |    |
| 111111 599.6      | 0  | 9.509 3172 | 631 | 9.532 7482 | 631  | 9.545 1819 | 9.557 6129 | 71 | 30 |    |
| 1111111 599.6     | 10 | 9.509 2815 | 631 | 9.532 7125 | 631  | 9.545 1462 | 9.557 5772 | 71 | 35 |    |
| 11111111 599.6    | 20 | 9.509 2458 | 631 | 9.532 6768 | 631  | 9.545 1105 | 9.557 5415 | 71 | 40 |    |
| 111111111 599.6   | 30 | 9.509 2101 | 631 | 9.532 6411 | 631  | 9.545 0748 | 9.557 5058 | 71 | 45 |    |
| 1111111111 599.6  | 40 | 9.509 1744 | 631 | 9.532 6054 | 631  | 9.545 0391 | 9.557 4701 | 71 | 50 |    |
| 11111111111 599.6 | 50 | 9.509 1387 | 631 | 9.532 5697 | 631  | 9.545 0034 | 9.557 4344 | 71 | 55 |    |
| 598               | 0  | 9.510 5314 | 631 | 9.533 9624 | 631  | 9.546 3961 | 9.558 8271 | 71 | 0  | 13 |
| 1 598.9           | 10 | 9.510 4957 | 631 | 9.533 9267 | 631  | 9.546 3604 | 9.558 7914 | 71 | 5  |    |
| 11 598.8          | 20 | 9.510 4600 | 631 | 9.533 8910 | 631  | 9.546 3247 | 9.558 7557 | 71 | 10 |    |
| 111 598.8         | 30 | 9.510 4243 | 631 | 9.533 8553 | 631  | 9.546 2890 | 9.558 7200 | 71 | 15 |    |
| 1111 598.6        | 40 | 9.510 3886 | 631 | 9.533 8196 | 631  | 9.546 2533 | 9.558 6843 | 71 | 20 |    |
| 11111 598.6       | 50 | 9.510 3529 | 631 | 9.533 7839 | 631  | 9.546 2176 | 9.558 6486 | 71 | 25 |    |
| 111111 598.6      | 0  | 9.510 3172 | 631 | 9.533 7482 | 631  | 9.546 1819 | 9.558 6129 | 71 | 30 |    |
| 1111111 598.6     | 10 | 9.510 2815 | 631 | 9.533 7125 | 631  | 9.546 1462 | 9.558 5772 | 71 | 35 |    |
| 11111111 598.6    | 20 | 9.510 2458 | 631 | 9.533 6768 | 631  | 9.546 1105 | 9.558 5415 | 71 | 40 |    |
| 111111111 598.6   | 30 | 9.510 2101 | 631 | 9.533 6411 | 631  | 9.546 0748 | 9.558 5058 | 71 | 45 |    |
| 1111111111 598.6  | 40 | 9.510 1744 | 631 | 9.533 6054 | 631  | 9.546 0391 | 9.558 4701 | 71 | 50 |    |
| 11111111111 598.6 | 50 | 9.510 1387 | 631 | 9.533 5697 | 631  | 9.546 0034 | 9.558 4344 | 71 | 55 |    |
| 597               | 0  | 9.511 5314 | 631 | 9.534 9624 | 631  | 9.547 3961 | 9.559 8271 | 71 | 0  | 12 |
| 1 597.9           | 10 | 9.511 4957 | 631 | 9.534 9267 | 631  | 9.547 3604 | 9.559 7914 | 71 | 5  |    |
| 11 597.8          | 20 | 9.511 4600 | 631 | 9.534 8910 | 631  | 9.547 3247 | 9.559 7557 | 71 | 10 |    |
| 111 597.8         | 30 | 9.511 4243 | 631 | 9.534 8553 | 631  | 9.547 2890 | 9.559 7200 | 71 | 15 |    |
| 1111 597.6        | 40 | 9.511 3886 | 631 | 9.534 8196 | 631  | 9.547 2533 | 9.559 6843 | 71 | 20 |    |
| 11111 597.6       | 50 | 9.511 3529 | 631 | 9.534 7839 | 631  | 9.547 2176 | 9.559 6486 | 71 | 25 |    |
| 111111 597.6      | 0  | 9.511 3172 | 631 | 9.534 7482 | 631  | 9.547 1819 | 9.559 6129 | 71 | 30 |    |
| 1111111 597.6     | 10 | 9.511 2815 | 631 | 9.534 7125 | 631  | 9.547 1462 | 9.559 5772 | 71 | 35 |    |
| 11111111 597.6    | 20 | 9.511 2458 | 631 | 9.534 6768 | 631  | 9.547 1105 | 9.559 5415 | 71 | 40 |    |
| 111111111 597.6   | 30 | 9.511 2101 | 631 | 9.534 6411 | 631  | 9.547 0748 | 9.559 5058 | 71 | 45 |    |
| 1111111111 597.6  | 40 | 9.511 1744 | 631 | 9.534 6054 | 631  | 9.547 0391 | 9.559 4701 | 71 | 50 |    |
| 11111111111 597.6 | 50 | 9.511 1387 | 631 | 9.534 5697 | 631  | 9.547 0034 | 9.559 4344 | 71 | 55 |    |
| 596               | 0  | 9.512 5314 | 631 | 9.535 9624 | 631  | 9.548 3961 | 9.560 8271 | 71 | 0  | 11 |
| 1 596.9           | 10 | 9.512 4957 | 631 | 9.535 9267 | 631  | 9.548 3604 | 9.560 7914 | 71 | 5  |    |
| 11 596.8          | 20 | 9.512 4600 | 631 | 9.535 8910 | 631  | 9.548 3247 | 9.560 7557 | 71 | 10 |    |
| 111 596.8         | 30 | 9.512 4243 | 631 | 9.535 8553 | 631  | 9.548 2890 | 9.560 7200 | 71 | 15 |    |
| 1111 596.6        | 40 | 9.512 3886 | 631 | 9.535 8196 | 631  | 9.548 2533 | 9.560 6843 | 71 | 20 |    |
| 11111 596.6       | 50 | 9.512 3529 | 631 | 9.535 7839 | 631  | 9.548 2176 | 9.560 6486 |    |    |    |



|    | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d. | "  | '  |
|----|----|------------|-----|------------|-------|------------|------------|----|----|----|
| 50 | 0  | 9.508 9556 | 617 | 9.532 8526 | 689   | 0.467 1474 | 9.976 1030 | 72 | 0  | 10 |
|    | 10 | 9.509 0173 | 617 | 9.532 9215 | 689   | 0.467 0785 | 9.976 0958 | 72 | 50 |    |
|    | 20 | 9.509 0790 | 617 | 9.532 9904 | 689   | 0.467 0096 | 9.976 0886 | 72 | 40 |    |
|    | 30 | 9.509 1407 | 617 | 9.533 0593 | 688   | 0.466 9407 | 9.976 0815 | 72 | 30 |    |
|    | 40 | 9.509 2024 | 617 | 9.533 1281 | 689   | 0.466 8719 | 9.976 0743 | 72 | 20 |    |
|    | 50 | 9.509 2641 | 617 | 9.533 1970 | 689   | 0.466 8030 | 9.976 0671 | 72 | 10 |    |
| 51 | 0  | 9.509 3258 | 616 | 9.533 2659 | 688   | 0.466 7341 | 9.976 0599 | 72 | 0  | 9  |
|    | 10 | 9.509 3874 | 617 | 9.533 3347 | 689   | 0.466 6653 | 9.976 0527 | 72 | 50 |    |
|    | 20 | 9.509 4491 | 616 | 9.533 4036 | 688   | 0.466 5964 | 9.976 0455 | 72 | 40 |    |
|    | 30 | 9.509 5107 | 617 | 9.533 4724 | 689   | 0.466 5276 | 9.976 0383 | 72 | 30 |    |
|    | 40 | 9.509 5724 | 616 | 9.533 5413 | 688   | 0.466 4587 | 9.976 0311 | 72 | 20 |    |
|    | 50 | 9.509 6340 | 616 | 9.533 6101 | 688   | 0.466 3899 | 9.976 0239 | 72 | 10 |    |
| 52 | 0  | 9.509 6956 | 616 | 9.533 6789 | 688   | 0.466 3211 | 9.976 0167 | 72 | 0  | 8  |
|    | 10 | 9.509 7572 | 616 | 9.533 7477 | 688   | 0.466 2523 | 9.976 0095 | 72 | 50 |    |
|    | 20 | 9.509 8188 | 616 | 9.533 8165 | 688   | 0.466 1835 | 9.976 0024 | 72 | 40 |    |
|    | 30 | 9.509 8804 | 616 | 9.533 8853 | 688   | 0.466 1147 | 9.975 9952 | 72 | 30 |    |
|    | 40 | 9.509 9420 | 616 | 9.533 9541 | 687   | 0.466 0459 | 9.975 9880 | 72 | 20 |    |
|    | 50 | 9.510 0036 | 615 | 9.534 0228 | 688   | 0.465 9772 | 9.975 9808 | 72 | 10 |    |
| 53 | 0  | 9.510 0651 | 616 | 9.534 0916 | 687   | 0.465 9084 | 9.975 9736 | 72 | 0  | 7  |
|    | 10 | 9.510 1267 | 615 | 9.534 1603 | 688   | 0.465 8397 | 9.975 9664 | 72 | 50 |    |
|    | 20 | 9.510 1882 | 616 | 9.534 2291 | 687   | 0.465 7709 | 9.975 9591 | 72 | 40 |    |
|    | 30 | 9.510 2498 | 615 | 9.534 2978 | 688   | 0.465 7022 | 9.975 9519 | 72 | 30 |    |
|    | 40 | 9.510 3113 | 615 | 9.534 3666 | 687   | 0.465 6334 | 9.975 9447 | 72 | 20 |    |
|    | 50 | 9.510 3728 | 615 | 9.534 4353 | 687   | 0.465 5647 | 9.975 9375 | 72 | 10 |    |
| 54 | 0  | 9.510 4343 | 615 | 9.534 5040 | 687   | 0.465 4960 | 9.975 9303 | 72 | 0  | 6  |
|    | 10 | 9.510 4958 | 615 | 9.534 5727 | 687   | 0.465 4273 | 9.975 9231 | 72 | 50 |    |
|    | 20 | 9.510 5573 | 614 | 9.534 6414 | 687   | 0.465 3586 | 9.975 9159 | 72 | 40 |    |
|    | 30 | 9.510 6187 | 615 | 9.534 7101 | 686   | 0.465 2899 | 9.975 9087 | 72 | 30 |    |
|    | 40 | 9.510 6802 | 615 | 9.534 7787 | 687   | 0.465 2213 | 9.975 9015 | 72 | 20 |    |
|    | 50 | 9.510 7417 | 614 | 9.534 8474 | 687   | 0.465 1526 | 9.975 8943 | 73 | 10 |    |
| 55 | 0  | 9.510 8031 | 614 | 9.534 9161 | 686   | 0.465 0839 | 9.975 8870 | 72 | 0  | 5  |
|    | 10 | 9.510 8645 | 615 | 9.534 9847 | 687   | 0.465 0153 | 9.975 8798 | 72 | 50 |    |
|    | 20 | 9.510 9260 | 614 | 9.535 0534 | 686   | 0.464 9466 | 9.975 8726 | 72 | 40 |    |
|    | 30 | 9.510 9874 | 614 | 9.535 1220 | 686   | 0.464 8780 | 9.975 8654 | 72 | 30 |    |
|    | 40 | 9.511 0488 | 614 | 9.535 1906 | 686   | 0.464 8094 | 9.975 8582 | 72 | 20 |    |
|    | 50 | 9.511 1102 | 614 | 9.535 2592 | 686   | 0.464 7408 | 9.975 8510 | 73 | 10 |    |
| 56 | 0  | 9.511 1716 | 613 | 9.535 3278 | 686   | 0.464 6722 | 9.975 8437 | 72 | 0  | 4  |
|    | 10 | 9.511 2329 | 614 | 9.535 3964 | 686   | 0.464 6036 | 9.975 8365 | 72 | 50 |    |
|    | 20 | 9.511 2943 | 614 | 9.535 4650 | 686   | 0.464 5350 | 9.975 8293 | 72 | 40 |    |
|    | 30 | 9.511 3557 | 613 | 9.535 5336 | 686   | 0.464 4664 | 9.975 8221 | 73 | 30 |    |
|    | 40 | 9.511 4170 | 614 | 9.535 6022 | 685   | 0.464 3978 | 9.975 8148 | 72 | 20 |    |
|    | 50 | 9.511 4784 | 613 | 9.535 6707 | 686   | 0.464 3293 | 9.975 8076 | 72 | 10 |    |
| 57 | 0  | 9.511 5397 | 613 | 9.535 7393 | 685   | 0.464 2607 | 9.975 8004 | 73 | 0  | 3  |
|    | 10 | 9.511 6010 | 613 | 9.535 8078 | 686   | 0.464 1922 | 9.975 7931 | 72 | 50 |    |
|    | 20 | 9.511 6623 | 613 | 9.535 8764 | 685   | 0.464 1236 | 9.975 7859 | 72 | 40 |    |
|    | 30 | 9.511 7236 | 613 | 9.535 9449 | 685   | 0.464 0551 | 9.975 7787 | 72 | 30 |    |
|    | 40 | 9.511 7849 | 613 | 9.536 0134 | 686   | 0.463 9866 | 9.975 7715 | 73 | 20 |    |
|    | 50 | 9.511 8462 | 612 | 9.536 0820 | 685   | 0.463 9180 | 9.975 7642 | 72 | 10 |    |
| 58 | 0  | 9.511 9074 | 613 | 9.536 1505 | 685   | 0.463 8495 | 9.975 7570 | 73 | 0  | 2  |
|    | 10 | 9.511 9687 | 612 | 9.536 2190 | 684   | 0.463 7810 | 9.975 7497 | 72 | 50 |    |
|    | 20 | 9.512 0299 | 613 | 9.536 2874 | 685   | 0.463 7126 | 9.975 7425 | 72 | 40 |    |
|    | 30 | 9.512 0912 | 612 | 9.536 3559 | 685   | 0.463 6441 | 9.975 7353 | 72 | 30 |    |
|    | 40 | 9.512 1524 | 612 | 9.536 4244 | 685   | 0.463 5756 | 9.975 7280 | 72 | 20 |    |
|    | 50 | 9.512 2136 | 613 | 9.536 4929 | 684   | 0.463 5071 | 9.975 7208 | 73 | 10 |    |
| 59 | 0  | 9.512 2749 | 612 | 9.536 5613 | 685   | 0.463 4387 | 9.975 7135 | 72 | 0  | 1  |
|    | 10 | 9.512 3361 | 611 | 9.536 6298 | 684   | 0.463 3702 | 9.975 7063 | 72 | 50 |    |
|    | 20 | 9.512 3972 | 612 | 9.536 6982 | 684   | 0.463 3018 | 9.975 6991 | 72 | 40 |    |
|    | 30 | 9.512 4584 | 612 | 9.536 7666 | 684   | 0.463 2334 | 9.975 6918 | 73 | 30 |    |
|    | 40 | 9.512 5196 | 612 | 9.536 8350 | 684   | 0.463 1650 | 9.975 6846 | 73 | 20 |    |
|    | 50 | 9.512 5808 | 611 | 9.536 9034 | 685   | 0.463 0966 | 9.975 6773 | 72 | 10 |    |
| 60 | 0  | 9.512 6419 |     | 9.536 9719 |       | 0.463 0281 | 9.975 6701 | 72 | 0  | 0  |
|    | "  | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d. | "  | '  |

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|    | "  | Sin        | d.   | Tang       | d. c. | Cotg       | Con        | d.  | "  |    |
|----|----|------------|------|------------|-------|------------|------------|-----|----|----|
| 0  | 0  | 9.512 6119 | 6.12 | 9.516 9719 | 6.81  | 0.161 0281 | 9.975 6701 | 71  | 0  | 60 |
|    | 10 | 9.512 7014 | 6.11 | 9.517 0602 | 6.81  | 0.162 0593 | 9.975 6628 | 72  | 50 |    |
|    | 20 | 9.512 7912 | 6.11 | 9.517 1486 | 6.81  | 0.163 0914 | 9.975 6556 | 73  | 40 |    |
|    | 30 | 9.512 8804 | 6.11 | 9.517 2370 | 6.81  | 0.164 1240 | 9.975 6484 | 74  | 30 |    |
|    | 40 | 9.512 8804 | 6.11 | 9.517 3254 | 6.81  | 0.165 1570 | 9.975 6412 | 75  | 20 |    |
|    | 50 | 9.512 9175 | 6.11 | 9.517 3137 | 6.81  | 0.166 1904 | 9.975 6340 | 76  | 10 |    |
| 1  | 0  | 9.513 0036 | 6.11 | 9.517 3831 | 6.81  | 0.167 2240 | 9.975 6268 | 77  | 0  | 59 |
|    | 10 | 9.513 0927 | 6.11 | 9.517 4504 | 6.81  | 0.168 2576 | 9.975 6194 | 78  | 50 |    |
|    | 20 | 9.513 1308 | 6.11 | 9.517 5188 | 6.81  | 0.169 2919 | 9.975 6120 | 79  | 40 |    |
|    | 30 | 9.513 1919 | 6.10 | 9.517 5871 | 6.81  | 0.170 3269 | 9.975 6046 | 80  | 30 |    |
|    | 40 | 9.513 2529 | 6.11 | 9.517 6554 | 6.81  | 0.171 3620 | 9.975 5972 | 81  | 20 |    |
|    | 50 | 9.513 3141 | 6.10 | 9.517 7237 | 6.81  | 0.172 3970 | 9.975 5898 | 82  | 10 |    |
| 2  | 0  | 9.513 3750 | 6.10 | 9.517 7920 | 6.81  | 0.173 4320 | 9.975 5824 | 83  | 0  | 58 |
|    | 10 | 9.513 4360 | 6.11 | 9.517 8603 | 6.81  | 0.174 4670 | 9.975 5750 | 84  | 50 |    |
|    | 20 | 9.513 4971 | 6.11 | 9.517 9286 | 6.81  | 0.175 5019 | 9.975 5676 | 85  | 40 |    |
|    | 30 | 9.513 5581 | 6.11 | 9.517 9969 | 6.81  | 0.176 5369 | 9.975 5602 | 86  | 30 |    |
|    | 40 | 9.513 6191 | 6.10 | 9.518 0652 | 6.81  | 0.177 5719 | 9.975 5528 | 87  | 20 |    |
|    | 50 | 9.513 6801 | 6.09 | 9.518 1335 | 6.81  | 0.178 6069 | 9.975 5454 | 88  | 10 |    |
| 3  | 0  | 9.513 7410 | 6.10 | 9.518 2018 | 6.81  | 0.179 6419 | 9.975 5380 | 89  | 0  | 57 |
|    | 10 | 9.513 8020 | 6.10 | 9.518 2699 | 6.81  | 0.180 6769 | 9.975 5306 | 90  | 50 |    |
|    | 20 | 9.513 8630 | 6.09 | 9.518 3382 | 6.81  | 0.181 7119 | 9.975 5232 | 91  | 40 |    |
|    | 30 | 9.513 9239 | 6.09 | 9.518 4065 | 6.81  | 0.182 7469 | 9.975 5158 | 92  | 30 |    |
|    | 40 | 9.513 9849 | 6.09 | 9.518 4748 | 6.81  | 0.183 7819 | 9.975 5084 | 93  | 20 |    |
|    | 50 | 9.514 0458 | 6.09 | 9.518 5431 | 6.81  | 0.184 8169 | 9.975 5010 | 94  | 10 |    |
| 4  | 0  | 9.514 1067 | 6.09 | 9.518 6114 | 6.81  | 0.185 8519 | 9.975 4936 | 95  | 0  | 56 |
|    | 10 | 9.514 1677 | 6.09 | 9.518 6797 | 6.81  | 0.186 8869 | 9.975 4862 | 96  | 50 |    |
|    | 20 | 9.514 2286 | 6.09 | 9.518 7480 | 6.81  | 0.187 9219 | 9.975 4788 | 97  | 40 |    |
|    | 30 | 9.514 2896 | 6.09 | 9.518 8163 | 6.81  | 0.188 9569 | 9.975 4714 | 98  | 30 |    |
|    | 40 | 9.514 3505 | 6.09 | 9.518 8846 | 6.81  | 0.189 9919 | 9.975 4640 | 99  | 20 |    |
|    | 50 | 9.514 4114 | 6.09 | 9.518 9529 | 6.81  | 0.191 0269 | 9.975 4566 | 100 | 10 |    |
| 5  | 0  | 9.514 4723 | 6.09 | 9.519 0212 | 6.81  | 0.192 0619 | 9.975 4492 | 1   | 0  | 55 |
|    | 10 | 9.514 5332 | 6.09 | 9.519 0895 | 6.81  | 0.193 0969 | 9.975 4418 | 2   | 50 |    |
|    | 20 | 9.514 5942 | 6.09 | 9.519 1578 | 6.81  | 0.194 1319 | 9.975 4344 | 3   | 40 |    |
|    | 30 | 9.514 6551 | 6.09 | 9.519 2261 | 6.81  | 0.195 1669 | 9.975 4270 | 4   | 30 |    |
|    | 40 | 9.514 7161 | 6.09 | 9.519 2944 | 6.81  | 0.196 2019 | 9.975 4196 | 5   | 20 |    |
|    | 50 | 9.514 7770 | 6.09 | 9.519 3627 | 6.81  | 0.197 2369 | 9.975 4122 | 6   | 10 |    |
| 6  | 0  | 9.514 8379 | 6.09 | 9.519 4310 | 6.81  | 0.198 2719 | 9.975 4048 | 7   | 0  | 54 |
|    | 10 | 9.514 8989 | 6.09 | 9.519 4993 | 6.81  | 0.199 3069 | 9.975 3974 | 8   | 50 |    |
|    | 20 | 9.514 9598 | 6.09 | 9.519 5676 | 6.81  | 0.200 3419 | 9.975 3900 | 9   | 40 |    |
|    | 30 | 9.515 0208 | 6.09 | 9.519 6359 | 6.81  | 0.201 3769 | 9.975 3826 | 10  | 30 |    |
|    | 40 | 9.515 0817 | 6.09 | 9.519 7042 | 6.81  | 0.202 4119 | 9.975 3752 | 11  | 20 |    |
|    | 50 | 9.515 1427 | 6.09 | 9.519 7725 | 6.81  | 0.203 4469 | 9.975 3678 | 12  | 10 |    |
| 7  | 0  | 9.515 2036 | 6.09 | 9.519 8408 | 6.81  | 0.204 4819 | 9.975 3604 | 13  | 0  | 53 |
|    | 10 | 9.515 2646 | 6.09 | 9.519 9091 | 6.81  | 0.205 5169 | 9.975 3530 | 14  | 50 |    |
|    | 20 | 9.515 3255 | 6.09 | 9.520 0000 | 6.81  | 0.206 5519 | 9.975 3456 | 15  | 40 |    |
|    | 30 | 9.515 3865 | 6.09 | 9.520 0713 | 6.81  | 0.207 5869 | 9.975 3382 | 16  | 30 |    |
|    | 40 | 9.515 4474 | 6.09 | 9.520 1426 | 6.81  | 0.208 6219 | 9.975 3308 | 17  | 20 |    |
|    | 50 | 9.515 5084 | 6.09 | 9.520 2139 | 6.81  | 0.209 6569 | 9.975 3234 | 18  | 10 |    |
| 8  | 0  | 9.515 5693 | 6.09 | 9.520 2852 | 6.81  | 0.210 6919 | 9.975 3160 | 19  | 0  | 52 |
|    | 10 | 9.515 6303 | 6.09 | 9.520 3565 | 6.81  | 0.211 7269 | 9.975 3086 | 20  | 50 |    |
|    | 20 | 9.515 6912 | 6.09 | 9.520 4278 | 6.81  | 0.212 7619 | 9.975 3012 | 21  | 40 |    |
|    | 30 | 9.515 7522 | 6.09 | 9.520 4991 | 6.81  | 0.213 7969 | 9.975 2938 | 22  | 30 |    |
|    | 40 | 9.515 8131 | 6.09 | 9.520 5704 | 6.81  | 0.214 8319 | 9.975 2864 | 23  | 20 |    |
|    | 50 | 9.515 8741 | 6.09 | 9.520 6417 | 6.81  | 0.215 8669 | 9.975 2790 | 24  | 10 |    |
| 9  | 0  | 9.515 9350 | 6.09 | 9.520 7130 | 6.81  | 0.216 9019 | 9.975 2716 | 25  | 0  | 51 |
|    | 10 | 9.515 9960 | 6.09 | 9.520 7843 | 6.81  | 0.217 9369 | 9.975 2642 | 26  | 50 |    |
|    | 20 | 9.516 0569 | 6.09 | 9.520 8556 | 6.81  | 0.218 9719 | 9.975 2568 | 27  | 40 |    |
|    | 30 | 9.516 1179 | 6.09 | 9.520 9269 | 6.81  | 0.219 1069 | 9.975 2494 | 28  | 30 |    |
|    | 40 | 9.516 1788 | 6.09 | 9.520 9982 | 6.81  | 0.220 1419 | 9.975 2420 | 29  | 20 |    |
|    | 50 | 9.516 2398 | 6.09 | 9.521 0695 | 6.81  | 0.221 1769 | 9.975 2346 | 30  | 10 |    |
| 10 | 0  | 9.516 3007 | 6.09 | 9.521 1408 | 6.81  | 0.222 2119 | 9.975 2272 | 31  | 0  | 50 |







|         | <i>n</i> | Sin        | d.   | Tang       | d. c | Cotg       | Cos        | d.  | <i>n</i> |    |
|---------|----------|------------|------|------------|------|------------|------------|-----|----------|----|
| 674     | 0        | 0.519 9115 | 6.15 | 0.515 1164 | 6.15 | 0.515 1164 | 0.519 9115 | 73  | 0        | 40 |
| 1 675   | 10       | 0.519 9713 | 6.15 | 0.515 1167 | 6.15 | 0.515 1167 | 0.519 9713 | 74  | 30       |    |
| 2 114.5 | 20       | 0.520 0311 | 6.15 | 0.515 1170 | 6.15 | 0.515 1170 | 0.520 0311 | 75  | 40       |    |
| 3 114.5 | 30       | 0.520 0915 | 6.15 | 0.515 1173 | 6.15 | 0.515 1173 | 0.520 0915 | 76  | 50       |    |
| 4 169.6 | 40       | 0.520 1515 | 6.15 | 0.515 1176 | 6.15 | 0.515 1176 | 0.520 1515 | 77  | 60       |    |
| 5 117.0 | 50       | 0.520 2111 | 6.15 | 0.515 1179 | 6.15 | 0.515 1179 | 0.520 2111 | 78  | 70       |    |
| 6 44.4  |          |            |      |            |      |            |            | 79  | 80       |    |
| 7 479.8 | 0        | 0.521 2711 | 6.15 | 0.515 1182 | 6.15 | 0.515 1182 | 0.521 2711 | 80  | 0        | 39 |
| 8 519.4 | 10       | 0.521 3311 | 6.15 | 0.515 1185 | 6.15 | 0.515 1185 | 0.521 3311 | 81  | 10       |    |
| 9 6.6   | 20       | 0.521 3910 | 6.15 | 0.515 1188 | 6.15 | 0.515 1188 | 0.521 3910 | 82  | 20       |    |
|         | 30       | 0.521 4509 | 6.15 | 0.515 1191 | 6.15 | 0.515 1191 | 0.521 4509 | 83  | 30       |    |
|         | 40       | 0.521 5109 | 6.15 | 0.515 1194 | 6.15 | 0.515 1194 | 0.521 5109 | 84  | 40       |    |
|         | 50       | 0.521 5708 | 6.15 | 0.515 1197 | 6.15 | 0.515 1197 | 0.521 5708 | 85  | 50       |    |
| 675     | 0        | 0.521 6307 | 6.15 | 0.515 1199 | 6.15 | 0.515 1199 | 0.521 6307 | 86  | 0        | 38 |
| 1 675   | 10       | 0.521 6906 | 6.15 | 0.515 1202 | 6.15 | 0.515 1202 | 0.521 6906 | 87  | 10       |    |
| 2 114.5 | 20       | 0.521 7505 | 6.15 | 0.515 1205 | 6.15 | 0.515 1205 | 0.521 7505 | 88  | 20       |    |
| 3 114.5 | 30       | 0.521 8104 | 6.15 | 0.515 1208 | 6.15 | 0.515 1208 | 0.521 8104 | 89  | 30       |    |
| 4 169.6 | 40       | 0.521 8703 | 6.15 | 0.515 1211 | 6.15 | 0.515 1211 | 0.521 8703 | 90  | 40       |    |
| 5 117.0 | 50       | 0.521 9302 | 6.15 | 0.515 1214 | 6.15 | 0.515 1214 | 0.521 9302 | 91  | 50       |    |
| 6 44.4  |          |            |      |            |      |            |            | 92  | 60       |    |
| 7 479.8 | 0        | 0.522 9902 | 6.15 | 0.515 1217 | 6.15 | 0.515 1217 | 0.522 9902 | 93  | 0        | 37 |
| 8 519.4 | 10       | 0.523 0501 | 6.15 | 0.515 1220 | 6.15 | 0.515 1220 | 0.523 0501 | 94  | 10       |    |
| 9 6.6   | 20       | 0.523 1100 | 6.15 | 0.515 1223 | 6.15 | 0.515 1223 | 0.523 1100 | 95  | 20       |    |
|         | 30       | 0.523 1700 | 6.15 | 0.515 1226 | 6.15 | 0.515 1226 | 0.523 1700 | 96  | 30       |    |
|         | 40       | 0.523 2300 | 6.15 | 0.515 1229 | 6.15 | 0.515 1229 | 0.523 2300 | 97  | 40       |    |
|         | 50       | 0.523 2900 | 6.15 | 0.515 1232 | 6.15 | 0.515 1232 | 0.523 2900 | 98  | 50       |    |
| 680     | 0        | 0.524 3500 | 6.15 | 0.515 1235 | 6.15 | 0.515 1235 | 0.524 3500 | 99  | 0        | 36 |
| 1 166.0 | 10       | 0.524 4100 | 6.15 | 0.515 1238 | 6.15 | 0.515 1238 | 0.524 4100 | 100 | 10       |    |
| 2 114.5 | 20       | 0.524 4700 | 6.15 | 0.515 1241 | 6.15 | 0.515 1241 | 0.524 4700 | 101 | 20       |    |
| 3 114.5 | 30       | 0.524 5300 | 6.15 | 0.515 1244 | 6.15 | 0.515 1244 | 0.524 5300 | 102 | 30       |    |
| 4 169.6 | 40       | 0.524 5900 | 6.15 | 0.515 1247 | 6.15 | 0.515 1247 | 0.524 5900 | 103 | 40       |    |
| 5 117.0 | 50       | 0.524 6500 | 6.15 | 0.515 1250 | 6.15 | 0.515 1250 | 0.524 6500 | 104 | 50       |    |
| 6 44.4  |          |            |      |            |      |            |            | 105 | 60       |    |
| 7 479.8 | 0        | 0.525 7100 | 6.15 | 0.515 1253 | 6.15 | 0.515 1253 | 0.525 7100 | 106 | 0        | 35 |
| 8 519.4 | 10       | 0.525 7700 | 6.15 | 0.515 1256 | 6.15 | 0.515 1256 | 0.525 7700 | 107 | 10       |    |
| 9 6.6   | 20       | 0.525 8300 | 6.15 | 0.515 1259 | 6.15 | 0.515 1259 | 0.525 8300 | 108 | 20       |    |
|         | 30       | 0.525 8900 | 6.15 | 0.515 1262 | 6.15 | 0.515 1262 | 0.525 8900 | 109 | 30       |    |
|         | 40       | 0.525 9500 | 6.15 | 0.515 1265 | 6.15 | 0.515 1265 | 0.525 9500 | 110 | 40       |    |
|         | 50       | 0.526 0100 | 6.15 | 0.515 1268 | 6.15 | 0.515 1268 | 0.526 0100 | 111 | 50       |    |
| 500     | 0        | 0.526 0700 | 6.15 | 0.515 1271 | 6.15 | 0.515 1271 | 0.526 0700 | 112 | 0        | 34 |
| 1 166.0 | 10       | 0.526 1300 | 6.15 | 0.515 1274 | 6.15 | 0.515 1274 | 0.526 1300 | 113 | 10       |    |
| 2 114.5 | 20       | 0.526 1900 | 6.15 | 0.515 1277 | 6.15 | 0.515 1277 | 0.526 1900 | 114 | 20       |    |
| 3 114.5 | 30       | 0.526 2500 | 6.15 | 0.515 1280 | 6.15 | 0.515 1280 | 0.526 2500 | 115 | 30       |    |
| 4 169.6 | 40       | 0.526 3100 | 6.15 | 0.515 1283 | 6.15 | 0.515 1283 | 0.526 3100 | 116 | 40       |    |
| 5 117.0 | 50       | 0.526 3700 | 6.15 | 0.515 1286 | 6.15 | 0.515 1286 | 0.526 3700 | 117 | 50       |    |
| 6 44.4  |          |            |      |            |      |            |            | 118 | 60       |    |
| 7 479.8 | 0        | 0.527 4300 | 6.15 | 0.515 1289 | 6.15 | 0.515 1289 | 0.527 4300 | 119 | 0        | 33 |
| 8 519.4 | 10       | 0.527 4900 | 6.15 | 0.515 1292 | 6.15 | 0.515 1292 | 0.527 4900 | 120 | 10       |    |
| 9 6.6   | 20       | 0.527 5500 | 6.15 | 0.515 1295 | 6.15 | 0.515 1295 | 0.527 5500 | 121 | 20       |    |
|         | 30       | 0.527 6100 | 6.15 | 0.515 1298 | 6.15 | 0.515 1298 | 0.527 6100 | 122 | 30       |    |
|         | 40       | 0.527 6700 | 6.15 | 0.515 1301 | 6.15 | 0.515 1301 | 0.527 6700 | 123 | 40       |    |
|         | 50       | 0.527 7300 | 6.15 | 0.515 1304 | 6.15 | 0.515 1304 | 0.527 7300 | 124 | 50       |    |
| 506     | 0        | 0.527 7900 | 6.15 | 0.515 1307 | 6.15 | 0.515 1307 | 0.527 7900 | 125 | 0        | 32 |
| 1 166.0 | 10       | 0.527 8500 | 6.15 | 0.515 1310 | 6.15 | 0.515 1310 | 0.527 8500 | 126 | 10       |    |
| 2 114.5 | 20       | 0.527 9100 | 6.15 | 0.515 1313 | 6.15 | 0.515 1313 | 0.527 9100 | 127 | 20       |    |
| 3 114.5 | 30       | 0.527 9700 | 6.15 | 0.515 1316 | 6.15 | 0.515 1316 | 0.527 9700 | 128 | 30       |    |
| 4 169.6 | 40       | 0.528 0300 | 6.15 | 0.515 1319 | 6.15 | 0.515 1319 | 0.528 0300 | 129 | 40       |    |
| 5 117.0 | 50       | 0.528 0900 | 6.15 | 0.515 1322 | 6.15 | 0.515 1322 | 0.528 0900 | 130 | 50       |    |
| 6 44.4  |          |            |      |            |      |            |            | 131 | 60       |    |
| 7 479.8 | 0        | 0.529 1500 | 6.15 | 0.515 1325 | 6.15 | 0.515 1325 | 0.529 1500 | 132 | 0        | 31 |
| 8 519.4 | 10       | 0.529 2100 | 6.15 | 0.515 1328 | 6.15 | 0.515 1328 | 0.529 2100 | 133 | 10       |    |
| 9 6.6   | 20       | 0.529 2700 | 6.15 | 0.515 1331 | 6.15 | 0.515 1331 | 0.529 2700 | 134 | 20       |    |
|         | 30       | 0.529 3300 | 6.15 | 0.515 1334 | 6.15 | 0.515 1334 | 0.529 3300 | 135 | 30       |    |
|         | 40       | 0.529 3900 | 6.15 | 0.515 1337 | 6.15 | 0.515 1337 | 0.529 3900 | 136 | 40       |    |
|         | 50       | 0.529 4500 | 6.15 | 0.515 1340 | 6.15 | 0.515 1340 | 0.529 4500 | 137 | 50       |    |
| 74      | 0        | 0.529 5100 | 6.15 | 0.515 1343 | 6.15 | 0.515 1343 | 0.529 5100 | 138 | 0        | 30 |
| 1 7.4   | 10       | 0.529 5700 | 6.15 | 0.515 1346 | 6.15 | 0.515 1346 | 0.529 5700 | 139 | 10       |    |
| 2 14.8  | 20       | 0.529 6300 | 6.15 | 0.515 1349 | 6.15 | 0.515 1349 | 0.529 6300 | 140 | 20       |    |
| 3 19.6  | 30       | 0.529 6900 | 6.15 | 0.515 1352 | 6.15 | 0.515 1352 | 0.529 6900 | 141 | 30       |    |
| 4 19.6  | 40       | 0.529 7500 | 6.15 | 0.515 1355 | 6.15 | 0.515 1355 | 0.529 7500 | 142 | 40       |    |
| 5 17.1  | 50       | 0.529 8100 | 6.15 | 0.515 1358 | 6.15 | 0.515 1358 | 0.529 8100 | 143 | 50       |    |
| 6 11.1  |          |            |      |            |      |            |            | 144 | 60       |    |
| 7 19.1  | 0        | 0.530 8700 | 6.15 | 0.515 1361 | 6.15 | 0.515 1361 | 0.530 8700 | 145 | 0        | 29 |
| 8 66.8  | 10       | 0.530 9300 | 6.15 | 0.515 1364 | 6.15 | 0.515 1364 | 0.530 9300 | 146 | 10       |    |
|         | 20       | 0.530 9900 | 6.15 | 0.515 1367 | 6.15 | 0.515 1367 | 0.530 9900 | 147 | 20       |    |
|         | 30       | 0.531 0500 | 6.15 | 0.515 1370 | 6.15 | 0.515 1370 | 0.531 0500 | 148 | 30       |    |
|         | 40       | 0.531 1100 | 6.15 | 0.515 1373 | 6.15 | 0.515 1373 | 0.531 1100 | 149 | 40       |    |
|         | 50       | 0.531 1700 | 6.15 | 0.515 1376 | 6.15 | 0.515 1376 | 0.531 1700 | 150 | 50       |    |
|         |          |            |      |            |      |            |            | 151 | 60       |    |
|         | 0        | 0.531 2300 | 6.15 | 0.515 1379 | 6.15 | 0.515 1379 | 0.531 2300 | 152 | 0        | 28 |
|         | 10       | 0.531 2900 | 6.15 | 0.515 1382 | 6.15 | 0.515 1382 | 0.531 2900 | 153 | 10       |    |
|         | 20       | 0.531 3500 | 6.15 | 0.515 1385 | 6.15 | 0.515 1385 | 0.531 3500 | 154 | 20       |    |
|         | 30       | 0.531 4100 | 6.15 | 0.515 1388 | 6.15 | 0.515 1388 | 0.531 4100 | 155 | 30       |    |
|         | 40       | 0.531 4700 | 6.15 | 0.515 1391 | 6.15 | 0.515 1391 | 0.531 4700 | 156 | 40       |    |
|         | 50       | 0.531 5300 | 6.15 | 0.515 1394 | 6.15 | 0.515 1394 | 0.531 5300 | 157 | 50       |    |
|         |          |            |      |            |      |            |            | 158 | 60       |    |
|         | 0        | 0.531 5900 | 6.15 | 0.515 1397 | 6.15 | 0.515 1397 | 0.531 5900 | 159 | 0        | 27 |
|         | 10       | 0.531 6500 | 6.15 | 0.515 1400 | 6.15 | 0.515 1400 | 0.531 6500 | 160 | 10       |    |
|         | 20       | 0.531 7100 | 6.15 | 0.515 1403 | 6.15 | 0.515 1403 | 0.531 7100 | 161 | 20       |    |
|         | 30       | 0.531 7700 | 6.15 | 0.515 1406 | 6.15 | 0.515 1406 | 0.531 7700 | 162 | 30       |    |
|         | 40       | 0.531 8300 | 6.15 | 0.515 1409 | 6.15 | 0.515 1409 | 0.531 8300 | 163 | 40       |    |
|         | 50       | 0.531 8900 | 6.15 | 0.515 1412 | 6.15 | 0.515 1412 | 0.531 8900 | 164 | 50       |    |
|         |          |            |      |            |      |            |            | 165 | 60       |    |
|         | 0        | 0.531 9500 | 6.15 | 0.515 1415 | 6.15 | 0.515 1415 | 0.531 9500 | 166 | 0        | 26 |
|         | 10       | 0.532 0100 | 6.15 | 0.515 1418 | 6.15 | 0.515 1418 | 0.532 0100 | 167 | 10       |    |
|         | 20       | 0.532 0700 | 6.15 | 0.515 1421 | 6.15 | 0.515 1421 | 0.532 0700 | 168 | 20       |    |
|         | 30       | 0.532 1300 | 6.15 | 0.515 1424 | 6.15 | 0.515 1424 | 0.532 1300 | 169 | 30       |    |
|         | 40       | 0.532 1900 | 6.15 | 0.515 1427 | 6.15 | 0.515 1427 | 0.532 1900 | 170 | 40       |    |
|         | 50       | 0.532 2500 | 6.15 | 0.515 1430 | 6.15 | 0.515 1430 | 0.532 2500 | 171 | 50       |    |
|         |          |            |      |            |      |            |            | 172 | 60       |    |
|         | 0        | 0.532 3100 | 6.15 | 0.515 1433 | 6.15 | 0.515 1433 | 0.532 3100 | 173 | 0        | 25 |
|         | 10       | 0.532 3700 | 6.15 | 0.515 1436 | 6.15 | 0.515 1436 | 0.532 3700 | 174 | 10       |    |
|         | 20       | 0.532 4300 | 6.15 | 0.515 1439 | 6.15 | 0.515 1439 | 0.532 4300 | 175 | 20       |    |
|         | 30       | 0.532 4900 | 6.15 | 0.515 1442 | 6.15 | 0.515 1442 | 0.532 4900 | 176 | 30       |    |
|         | 40       | 0.532 5500 | 6.15 | 0.515 1445 | 6.15 | 0.515 1445 | 0.532 5500 | 177 | 40       |    |
|         | 50       | 0.532 6100 | 6.15 | 0.515 1448 | 6.15 | 0.515 1448 | 0.532 6100 | 178 | 50       |    |
|         |          |            |      |            |      |            |            | 179 | 60       |    |
|         | 0        | 0.532 6700 | 6.15 | 0.515 1451 | 6.15 | 0.515 1451 | 0.532 6700 | 180 | 0        | 24 |
|         | 10       | 0.532 7300 | 6.15 | 0.515 1454 | 6.15 | 0.515 1454 | 0.532 7300 | 181 | 10       |    |
|         |          |            |      |            |      |            |            |     |          |    |



|    | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d. | "  | '  |
|----|----|------------|-----|------------|-------|------------|------------|----|----|----|
| 30 | 0  | 9.523 4953 | 594 | 9.549 1487 | 669   | 0.450 8513 | 9.974 3466 | 75 | 0  | 30 |
|    | 10 | 9.523 5547 | 595 | 9.549 2156 | 669   | 0.450 7844 | 9.974 3391 | 75 | 50 |    |
|    | 20 | 9.523 6142 | 594 | 9.549 2825 | 669   | 0.450 7175 | 9.974 3316 | 74 | 40 |    |
|    | 30 | 9.523 6736 | 594 | 9.549 3494 | 669   | 0.450 6506 | 9.974 3242 | 75 | 30 |    |
|    | 40 | 9.523 7330 | 594 | 9.549 4163 | 669   | 0.450 5837 | 9.974 3167 | 74 | 20 |    |
|    | 50 | 9.523 7924 | 594 | 9.549 4832 | 668   | 0.450 5168 | 9.974 3093 | 75 | 10 |    |
| 31 | 0  | 9.523 8518 | 594 | 9.549 5500 | 669   | 0.450 4500 | 9.974 3018 | 75 | 0  | 29 |
|    | 10 | 9.523 9112 | 594 | 9.549 6169 | 669   | 0.450 3831 | 9.974 2943 | 74 | 50 |    |
|    | 20 | 9.523 9706 | 594 | 9.549 6838 | 668   | 0.450 3162 | 9.974 2869 | 75 | 40 |    |
|    | 30 | 9.524 0300 | 594 | 9.549 7506 | 668   | 0.450 2494 | 9.974 2794 | 75 | 30 |    |
|    | 40 | 9.524 0894 | 594 | 9.549 8174 | 669   | 0.450 1826 | 9.974 2719 | 74 | 20 |    |
|    | 50 | 9.524 1487 | 594 | 9.549 8843 | 668   | 0.450 1157 | 9.974 2645 | 75 | 10 |    |
| 32 | 0  | 9.524 2081 | 593 | 9.549 9511 | 668   | 0.450 0489 | 9.974 2570 | 75 | 0  | 28 |
|    | 10 | 9.524 2674 | 594 | 9.550 0179 | 668   | 0.449 9821 | 9.974 2495 | 74 | 50 |    |
|    | 20 | 9.524 3268 | 593 | 9.550 0847 | 668   | 0.449 9153 | 9.974 2421 | 75 | 40 |    |
|    | 30 | 9.524 3861 | 593 | 9.550 1515 | 668   | 0.449 8485 | 9.974 2346 | 75 | 30 |    |
|    | 40 | 9.524 4454 | 593 | 9.550 2183 | 668   | 0.449 7817 | 9.974 2271 | 75 | 20 |    |
|    | 50 | 9.524 5047 | 593 | 9.550 2851 | 668   | 0.449 7149 | 9.974 2196 | 74 | 10 |    |
| 33 | 0  | 9.524 5640 | 593 | 9.550 3519 | 667   | 0.449 6481 | 9.974 2122 | 75 | 0  | 27 |
|    | 10 | 9.524 6233 | 593 | 9.550 4186 | 668   | 0.449 5814 | 9.974 2047 | 75 | 50 |    |
|    | 20 | 9.524 6826 | 593 | 9.550 4854 | 667   | 0.449 5146 | 9.974 1972 | 75 | 40 |    |
|    | 30 | 9.524 7419 | 592 | 9.550 5521 | 668   | 0.449 4479 | 9.974 1897 | 75 | 30 |    |
|    | 40 | 9.524 8011 | 593 | 9.550 6189 | 667   | 0.449 3811 | 9.974 1822 | 74 | 20 |    |
|    | 50 | 9.524 8604 | 592 | 9.550 6856 | 667   | 0.449 3144 | 9.974 1748 | 75 | 10 |    |
| 34 | 0  | 9.524 9196 | 593 | 9.550 7523 | 668   | 0.449 2477 | 9.974 1673 | 75 | 0  | 26 |
|    | 10 | 9.524 9789 | 592 | 9.550 8191 | 667   | 0.449 1809 | 9.974 1598 | 75 | 50 |    |
|    | 20 | 9.525 0381 | 592 | 9.550 8858 | 667   | 0.449 1142 | 9.974 1523 | 75 | 40 |    |
|    | 30 | 9.525 0973 | 592 | 9.550 9525 | 667   | 0.449 0475 | 9.974 1448 | 75 | 30 |    |
|    | 40 | 9.525 1565 | 592 | 9.551 0192 | 667   | 0.448 9808 | 9.974 1373 | 75 | 20 |    |
|    | 50 | 9.525 2157 | 592 | 9.551 0859 | 666   | 0.448 9141 | 9.974 1298 | 74 | 10 |    |
| 35 | 0  | 9.525 2749 | 592 | 9.551 1525 | 667   | 0.448 8475 | 9.974 1224 | 75 | 0  | 25 |
|    | 10 | 9.525 3341 | 591 | 9.551 2192 | 667   | 0.448 7808 | 9.974 1149 | 75 | 50 |    |
|    | 20 | 9.525 3932 | 592 | 9.551 2859 | 666   | 0.448 7141 | 9.974 1074 | 75 | 40 |    |
|    | 30 | 9.525 4524 | 592 | 9.551 3525 | 667   | 0.448 6475 | 9.974 0999 | 75 | 30 |    |
|    | 40 | 9.525 5116 | 592 | 9.551 4192 | 666   | 0.448 5808 | 9.974 0924 | 75 | 20 |    |
|    | 50 | 9.525 5707 | 591 | 9.551 4858 | 666   | 0.448 5142 | 9.974 0849 | 75 | 10 |    |
| 36 | 0  | 9.525 6298 | 592 | 9.551 5524 | 667   | 0.448 4476 | 9.974 0774 | 75 | 0  | 24 |
|    | 10 | 9.525 6890 | 591 | 9.551 6191 | 666   | 0.448 3809 | 9.974 0699 | 75 | 50 |    |
|    | 20 | 9.525 7481 | 591 | 9.551 6857 | 666   | 0.448 3143 | 9.974 0624 | 75 | 40 |    |
|    | 30 | 9.525 8072 | 591 | 9.551 7523 | 666   | 0.448 2477 | 9.974 0549 | 75 | 30 |    |
|    | 40 | 9.525 8663 | 591 | 9.551 8189 | 666   | 0.448 1811 | 9.974 0474 | 75 | 20 |    |
|    | 50 | 9.525 9254 | 590 | 9.551 8855 | 666   | 0.448 1145 | 9.974 0399 | 75 | 10 |    |
| 37 | 0  | 9.525 9844 | 591 | 9.551 9521 | 665   | 0.448 0479 | 9.974 0324 | 75 | 0  | 23 |
|    | 10 | 9.526 0435 | 591 | 9.552 0186 | 666   | 0.447 9814 | 9.974 0249 | 75 | 50 |    |
|    | 20 | 9.526 1026 | 590 | 9.552 0852 | 666   | 0.447 9148 | 9.974 0174 | 75 | 40 |    |
|    | 30 | 9.526 1616 | 590 | 9.552 1518 | 665   | 0.447 8482 | 9.974 0099 | 75 | 30 |    |
|    | 40 | 9.526 2207 | 590 | 9.552 2183 | 666   | 0.447 7817 | 9.974 0024 | 76 | 20 |    |
|    | 50 | 9.526 2797 | 590 | 9.552 2849 | 665   | 0.447 7151 | 9.973 9948 | 75 | 10 |    |
| 38 | 0  | 9.526 3387 | 591 | 9.552 3514 | 665   | 0.447 6486 | 9.973 9873 | 75 | 0  | 22 |
|    | 10 | 9.526 3978 | 590 | 9.552 4179 | 665   | 0.447 5821 | 9.973 9798 | 75 | 50 |    |
|    | 20 | 9.526 4568 | 590 | 9.552 4844 | 666   | 0.447 5156 | 9.973 9723 | 75 | 40 |    |
|    | 30 | 9.526 5158 | 589 | 9.552 5510 | 665   | 0.447 4490 | 9.973 9648 | 75 | 30 |    |
|    | 40 | 9.526 5747 | 590 | 9.552 6175 | 665   | 0.447 3825 | 9.973 9573 | 75 | 20 |    |
|    | 50 | 9.526 6337 | 590 | 9.552 6840 | 664   | 0.447 3160 | 9.973 9498 | 76 | 10 |    |
| 39 | 0  | 9.526 6927 | 590 | 9.552 7504 | 665   | 0.447 2496 | 9.973 9422 | 75 | 0  | 21 |
|    | 10 | 9.526 7517 | 589 | 9.552 8169 | 665   | 0.447 1831 | 9.973 9347 | 75 | 50 |    |
|    | 20 | 9.526 8106 | 590 | 9.552 8834 | 665   | 0.447 1166 | 9.973 9272 | 75 | 40 |    |
|    | 30 | 9.526 8696 | 589 | 9.552 9499 | 664   | 0.447 0501 | 9.973 9197 | 75 | 30 |    |
|    | 40 | 9.526 9285 | 589 | 9.553 0163 | 665   | 0.446 9837 | 9.973 9122 | 76 | 20 |    |
|    | 50 | 9.526 9874 | 589 | 9.553 0828 | 664   | 0.446 9172 | 9.973 9046 | 75 | 10 |    |
| 40 | 0  | 9.527 0463 |     | 9.553 1492 |       | 0.446 8508 | 9.973 8971 |    | 0  | 20 |
|    |    | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d. | "  | '  |

667

1 66.7

2 133.4

3 200.1

4 266.8

5 333.5

6 400.2

7 466.9

8 533.6

9 600.3

665

1 66.5

2 133.0

3 199.5

4 266.0

5 332.5

6 399.0

7 465.5

8 532.0

9 598.5

594

1 59.4

2 118.8

3 178.2

4 237.6

5 297.0

6 356.4

7 415.8

8 475.2

9 534.6

592

1 59.2

2 118.4

3 177.6

4 236.8

5 296.0

6 355.2

7 414.4

8 473.6

9 532.8

589

1 58.9

2 117.8

3 176.7

4 235.6

5 294.5

6 353.4

7 412.3

8 471.2

9 530.8

75

1 7.5

2 15.0

3 22.5

4 30.0

5 37.5

6 45.0

7 52.5

8 60.0

9 67.5



084  
1 66.4  
3 113.4  
5 169.4  
7 225.6  
9 281.0  
11 336.4  
13 391.8  
15 447.2  
17 502.6

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3 112.0  
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7 224.0  
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11 336.0  
13 392.0  
15 448.0  
17 504.0

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1 117.6  
3 176.4  
5 235.2  
7 294.0  
9 352.8  
11 411.6  
13 470.4  
15 529.2

586  
1 117.6  
3 176.4  
5 235.2  
7 294.0  
9 352.8  
11 411.6  
13 470.4  
15 529.2

76  
1 7.6  
3 15.2  
5 22.8  
7 30.4  
9 38.0  
11 45.6  
13 53.2  
15 60.8  
17 68.4

|  |    | Rin           | d.  | Tang       | d. c. | Colg       | Con        | d. |    |    |  |
|--|----|---------------|-----|------------|-------|------------|------------|----|----|----|--|
|  | 40 | 0 9.527 0361  | 589 | 9.551 1493 | 66.4  | 0.126 0361 | 9.973 8971 | 25 | 0  | 20 |  |
|  |    | 10 9.527 1052 | 589 | 9.551 2157 | 66.4  | 0.126 1052 | 9.973 8896 | 25 | 50 |    |  |
|  |    | 20 9.527 1631 | 589 | 9.551 2811 | 66.4  | 0.126 1631 | 9.973 8821 | 25 | 40 |    |  |
|  |    | 30 9.527 2210 | 589 | 9.551 3465 | 66.4  | 0.126 2210 | 9.973 8746 | 25 | 30 |    |  |
|  |    | 40 9.527 2819 | 589 | 9.551 4119 | 66.4  | 0.126 2819 | 9.973 8671 | 25 | 20 |    |  |
|  |    | 50 9.527 3408 | 589 | 9.551 4773 | 66.4  | 0.126 3408 | 9.973 8596 | 25 | 10 |    |  |
|  | 41 | 0 9.527 3997  | 589 | 9.551 5427 | 66.4  | 0.126 3997 | 9.973 8521 | 25 | 0  | 19 |  |
|  |    | 10 9.527 4585 | 589 | 9.551 6081 | 66.4  | 0.126 4585 | 9.973 8446 | 25 | 50 |    |  |
|  |    | 20 9.527 5174 | 589 | 9.551 6735 | 66.4  | 0.126 5174 | 9.973 8371 | 25 | 40 |    |  |
|  |    | 30 9.527 5763 | 589 | 9.551 7389 | 66.4  | 0.126 5763 | 9.973 8296 | 25 | 30 |    |  |
|  |    | 40 9.527 6352 | 589 | 9.551 8043 | 66.4  | 0.126 6352 | 9.973 8221 | 25 | 20 |    |  |
|  |    | 50 9.527 6941 | 589 | 9.551 8697 | 66.4  | 0.126 6941 | 9.973 8146 | 25 | 10 |    |  |
|  | 42 | 0 9.527 7530  | 589 | 9.551 9351 | 66.4  | 0.126 7530 | 9.973 8071 | 25 | 0  | 18 |  |
|  |    | 10 9.527 8119 | 589 | 9.552 0005 | 66.4  | 0.126 8119 | 9.973 7996 | 25 | 50 |    |  |
|  |    | 20 9.527 8708 | 589 | 9.552 0659 | 66.4  | 0.126 8708 | 9.973 7921 | 25 | 40 |    |  |
|  |    | 30 9.527 9297 | 589 | 9.552 1313 | 66.4  | 0.126 9297 | 9.973 7846 | 25 | 30 |    |  |
|  |    | 40 9.527 9886 | 589 | 9.552 1967 | 66.4  | 0.126 9886 | 9.973 7771 | 25 | 20 |    |  |
|  |    | 50 9.528 0475 | 589 | 9.552 2621 | 66.4  | 0.127 0475 | 9.973 7696 | 25 | 10 |    |  |
|  | 43 | 0 9.528 1064  | 589 | 9.552 3275 | 66.4  | 0.127 1064 | 9.973 7621 | 25 | 0  | 17 |  |
|  |    | 10 9.528 1653 | 589 | 9.552 3929 | 66.4  | 0.127 1653 | 9.973 7546 | 25 | 50 |    |  |
|  |    | 20 9.528 2242 | 589 | 9.552 4583 | 66.4  | 0.127 2242 | 9.973 7471 | 25 | 40 |    |  |
|  |    | 30 9.528 2831 | 589 | 9.552 5237 | 66.4  | 0.127 2831 | 9.973 7396 | 25 | 30 |    |  |
|  |    | 40 9.528 3420 | 589 | 9.552 5891 | 66.4  | 0.127 3420 | 9.973 7321 | 25 | 20 |    |  |
|  |    | 50 9.528 4009 | 589 | 9.552 6545 | 66.4  | 0.127 4009 | 9.973 7246 | 25 | 10 |    |  |
|  | 44 | 0 9.528 4598  | 589 | 9.552 7199 | 66.4  | 0.127 4598 | 9.973 7171 | 25 | 0  | 16 |  |
|  |    | 10 9.528 5187 | 589 | 9.552 7853 | 66.4  | 0.127 5187 | 9.973 7096 | 25 | 50 |    |  |
|  |    | 20 9.528 5776 | 589 | 9.552 8507 | 66.4  | 0.127 5776 | 9.973 7021 | 25 | 40 |    |  |
|  |    | 30 9.528 6365 | 589 | 9.552 9161 | 66.4  | 0.127 6365 | 9.973 6946 | 25 | 30 |    |  |
|  |    | 40 9.528 6954 | 589 | 9.552 9815 | 66.4  | 0.127 6954 | 9.973 6871 | 25 | 20 |    |  |
|  |    | 50 9.528 7543 | 589 | 9.553 0469 | 66.4  | 0.127 7543 | 9.973 6796 | 25 | 10 |    |  |
|  | 45 | 0 9.528 8132  | 589 | 9.553 1123 | 66.4  | 0.127 8132 | 9.973 6721 | 25 | 0  | 15 |  |
|  |    | 10 9.528 8721 | 589 | 9.553 1777 | 66.4  | 0.127 8721 | 9.973 6646 | 25 | 50 |    |  |
|  |    | 20 9.528 9310 | 589 | 9.553 2431 | 66.4  | 0.127 9310 | 9.973 6571 | 25 | 40 |    |  |
|  |    | 30 9.529 0000 | 589 | 9.553 3085 | 66.4  | 0.128 0000 | 9.973 6496 | 25 | 30 |    |  |
|  |    | 40 9.529 0689 | 589 | 9.553 3739 | 66.4  | 0.128 0689 | 9.973 6421 | 25 | 20 |    |  |
|  |    | 50 9.529 1378 | 589 | 9.553 4393 | 66.4  | 0.128 1378 | 9.973 6346 | 25 | 10 |    |  |
|  | 46 | 0 9.529 1967  | 589 | 9.553 5047 | 66.4  | 0.128 1967 | 9.973 6271 | 25 | 0  | 14 |  |
|  |    | 10 9.529 2556 | 589 | 9.553 5701 | 66.4  | 0.128 2556 | 9.973 6196 | 25 | 50 |    |  |
|  |    | 20 9.529 3145 | 589 | 9.553 6355 | 66.4  | 0.128 3145 | 9.973 6121 | 25 | 40 |    |  |
|  |    | 30 9.529 3734 | 589 | 9.553 7009 | 66.4  | 0.128 3734 | 9.973 6046 | 25 | 30 |    |  |
|  |    | 40 9.529 4323 | 589 | 9.553 7663 | 66.4  | 0.128 4323 | 9.973 5971 | 25 | 20 |    |  |
|  |    | 50 9.529 4912 | 589 | 9.553 8317 | 66.4  | 0.128 4912 | 9.973 5896 | 25 | 10 |    |  |
|  | 47 | 0 9.529 5501  | 589 | 9.553 8971 | 66.4  | 0.128 5501 | 9.973 5821 | 25 | 0  | 13 |  |
|  |    | 10 9.529 6090 | 589 | 9.553 9625 | 66.4  | 0.128 6090 | 9.973 5746 | 25 | 50 |    |  |
|  |    | 20 9.529 6679 | 589 | 9.554 0279 | 66.4  | 0.128 6679 | 9.973 5671 | 25 | 40 |    |  |
|  |    | 30 9.529 7268 | 589 | 9.554 0933 | 66.4  | 0.128 7268 | 9.973 5596 | 25 | 30 |    |  |
|  |    | 40 9.529 7857 | 589 | 9.554 1587 | 66.4  | 0.128 7857 | 9.973 5521 | 25 | 20 |    |  |
|  |    | 50 9.529 8446 | 589 | 9.554 2241 | 66.4  | 0.128 8446 | 9.973 5446 | 25 | 10 |    |  |
|  | 48 | 0 9.529 9035  | 589 | 9.554 2895 | 66.4  | 0.128 9035 | 9.973 5371 | 25 | 0  | 12 |  |
|  |    | 10 9.529 9624 | 589 | 9.554 3549 | 66.4  | 0.129 0624 | 9.973 5296 | 25 | 50 |    |  |
|  |    | 20 9.530 0213 | 589 | 9.554 4203 | 66.4  | 0.129 1213 | 9.973 5221 | 25 | 40 |    |  |
|  |    | 30 9.530 0802 | 589 | 9.554 4857 | 66.4  | 0.129 1802 | 9.973 5146 | 25 | 30 |    |  |
|  |    | 40 9.530 1391 | 589 | 9.554 5511 | 66.4  | 0.129 2391 | 9.973 5071 | 25 | 20 |    |  |
|  |    | 50 9.530 1980 | 589 | 9.554 6165 | 66.4  | 0.129 2980 | 9.973 4996 | 25 | 10 |    |  |
|  | 49 | 0 9.530 2569  | 589 | 9.554 6819 | 66.4  | 0.129 3569 | 9.973 4921 | 25 | 0  | 11 |  |
|  |    | 10 9.530 3158 | 589 | 9.554 7473 | 66.4  | 0.129 4158 | 9.973 4846 | 25 | 50 |    |  |
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|    | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d. | "  | '  |
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|    | "  | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d. | "  | '  |

658

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| 25-125 | 20 | 0-531 385-25 | 578 | 0-561 40275 | 655   | 0-113 6916 | 0-978 7753 |     |  |
| 25-380 | 30 | 0-531 389-73 | 578 | 0-561 40765 | 655   | 0-113 7001 | 0-978 7838 |     |  |
| 25-635 | 40 | 0-531 394-21 | 578 | 0-561 41255 | 655   | 0-113 7086 | 0-978 7923 |     |  |
| 25-890 | 50 | 0-531 398-69 | 578 | 0-561 41745 | 655   | 0-113 7171 | 0-978 8008 |     |  |
| 26-145 |    |              |     |             |       |            |            |     |  |
| 26-400 | 10 | 0-531 403-17 | 578 | 0-561 42235 | 655   | 0-113 7256 | 0-978 8093 |     |  |
| 26-655 | 20 | 0-531 407-65 | 578 | 0-561 42725 | 655   | 0-113 7341 | 0-978 8178 |     |  |
| 26-910 | 30 | 0-531 412-13 | 578 | 0-561 43215 | 655   | 0-113 7426 | 0-978 8263 |     |  |
| 27-165 | 40 | 0-531 416-61 | 578 | 0-561 43705 | 655   | 0-113 7511 | 0-978 8348 |     |  |
| 27-420 | 50 | 0-531 421-09 | 578 | 0-561 44195 | 655   | 0-113 7596 | 0-978 8433 |     |  |
| 27-675 |    |              |     |             |       |            |            |     |  |
| 27-930 | 10 | 0-531 425-57 | 578 | 0-561 44685 | 655   | 0-113 7681 | 0-978 8518 |     |  |
| 28-185 | 20 | 0-531 430-05 | 578 | 0-561 45175 | 655   | 0-113 7766 | 0-978 8603 |     |  |
| 28-440 | 30 | 0-531 434-53 | 578 | 0-561 45665 | 655   | 0-113 7851 | 0-978 8688 |     |  |
| 28-695 | 40 | 0-531 439-01 | 578 | 0-561 46155 | 655   | 0-113 7936 | 0-978 8773 |     |  |
| 28-950 | 50 | 0-531 443-49 | 578 | 0-561 46645 | 655   | 0-113 8021 | 0-978 8858 |     |  |
| 29-205 |    |              |     |             |       |            |            |     |  |
| 29-460 | 10 | 0-531 447-97 | 578 | 0-561 47135 | 655   | 0-113 8106 | 0-978 8943 |     |  |
| 29-715 | 20 | 0-531 452-45 | 578 | 0-561 47625 | 655   | 0-113 8191 | 0-978 9028 |     |  |
| 29-970 | 30 | 0-531 456-93 | 578 | 0-561 48115 | 655   | 0-113 8276 | 0-978 9113 |     |  |
| 30-225 | 40 | 0-531 461-41 | 578 | 0-561 48605 | 655   | 0-113 8361 | 0-978 9198 |     |  |
| 30-480 | 50 | 0-531 465-89 | 578 | 0-561 49095 | 655   | 0-113 8446 | 0-978 9283 |     |  |
| 30-735 |    |              |     |             |       |            |            |     |  |
| 30-990 | 10 | 0-531 470-37 | 578 | 0-561 49585 | 655   | 0-113 8531 | 0-978 9368 |     |  |
| 31-245 | 20 | 0-531 474-8  |     |             |       |            |            |     |  |



|    | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d. | "  |    |
|----|----|------------|-----|------------|-------|------------|------------|----|----|----|
| 10 | 0  | 9.537 5070 | 573 | 9.564 9831 | 650   | 0.435 0169 | 9.972 5239 | 77 | 0  | 50 |
|    | 10 | 9.537 5643 | 573 | 9.565 0481 | 651   | 0.434 9519 | 9.972 5162 | 77 | 50 |    |
|    | 20 | 9.537 6216 | 573 | 9.565 1132 | 650   | 0.434 8868 | 9.972 5085 | 78 | 40 |    |
|    | 30 | 9.537 6789 | 573 | 9.565 1782 | 650   | 0.434 8218 | 9.972 5007 | 77 | 30 |    |
|    | 40 | 9.537 7362 | 573 | 9.565 2432 | 651   | 0.434 7568 | 9.972 4930 | 78 | 20 |    |
|    | 50 | 9.537 7935 | 573 | 9.565 3083 | 650   | 0.434 6917 | 9.972 4852 | 77 | 10 |    |
| 11 | 0  | 9.537 8508 | 573 | 9.565 3733 | 650   | 0.434 6267 | 9.972 4775 | 77 | 0  | 49 |
|    | 10 | 9.537 9081 | 572 | 9.565 4383 | 650   | 0.434 5617 | 9.972 4698 | 78 | 50 |    |
|    | 20 | 9.537 9653 | 573 | 9.565 5033 | 650   | 0.434 4967 | 9.972 4620 | 77 | 40 |    |
|    | 30 | 9.538 0226 | 573 | 9.565 5683 | 650   | 0.434 4317 | 9.972 4543 | 78 | 30 |    |
|    | 40 | 9.538 0798 | 572 | 9.565 6333 | 650   | 0.434 3667 | 9.972 4465 | 77 | 20 |    |
|    | 50 | 9.538 1371 | 572 | 9.565 6983 | 650   | 0.434 3017 | 9.972 4388 | 78 | 10 |    |
| 12 | 0  | 9.538 1943 | 572 | 9.565 7633 | 649   | 0.434 2367 | 9.972 4310 | 77 | 0  | 48 |
|    | 10 | 9.538 2515 | 572 | 9.565 8282 | 650   | 0.434 1718 | 9.972 4233 | 77 | 50 |    |
|    | 20 | 9.538 3087 | 573 | 9.565 8932 | 650   | 0.434 1068 | 9.972 4156 | 78 | 40 |    |
|    | 30 | 9.538 3660 | 572 | 9.565 9582 | 649   | 0.434 0418 | 9.972 4078 | 77 | 30 |    |
|    | 40 | 9.538 4232 | 571 | 9.566 0231 | 649   | 0.433 9769 | 9.972 4001 | 78 | 20 |    |
|    | 50 | 9.538 4803 | 572 | 9.566 0880 | 650   | 0.433 9120 | 9.972 3923 | 78 | 10 |    |
| 13 | 0  | 9.538 5375 | 572 | 9.566 1530 | 649   | 0.433 8470 | 9.972 3845 | 77 | 0  | 47 |
|    | 10 | 9.538 5947 | 572 | 9.566 2179 | 649   | 0.433 7821 | 9.972 3768 | 78 | 50 |    |
|    | 20 | 9.538 6519 | 571 | 9.566 2828 | 649   | 0.433 7172 | 9.972 3690 | 77 | 40 |    |
|    | 30 | 9.538 7090 | 571 | 9.566 3477 | 649   | 0.433 6523 | 9.972 3613 | 78 | 30 |    |
|    | 40 | 9.538 7661 | 572 | 9.566 4126 | 649   | 0.433 5874 | 9.972 3535 | 77 | 20 |    |
|    | 50 | 9.538 8233 | 571 | 9.566 4775 | 649   | 0.433 5225 | 9.972 3458 | 78 | 10 |    |
| 14 | 0  | 9.538 8804 | 571 | 9.566 5424 | 649   | 0.433 4576 | 9.972 3380 | 78 | 0  | 46 |
|    | 10 | 9.538 9375 | 571 | 9.566 6073 | 649   | 0.433 3927 | 9.972 3302 | 77 | 50 |    |
|    | 20 | 9.538 9946 | 571 | 9.566 6722 | 648   | 0.433 3278 | 9.972 3225 | 78 | 40 |    |
|    | 30 | 9.539 0517 | 571 | 9.566 7370 | 649   | 0.433 2630 | 9.972 3147 | 77 | 30 |    |
|    | 40 | 9.539 1088 | 571 | 9.566 8019 | 648   | 0.433 1981 | 9.972 3070 | 78 | 20 |    |
|    | 50 | 9.539 1659 | 571 | 9.566 8667 | 649   | 0.433 1333 | 9.972 2992 | 78 | 10 |    |
| 15 | 0  | 9.539 2230 | 571 | 9.566 9316 | 648   | 0.433 0684 | 9.972 2914 | 78 | 0  | 45 |
|    | 10 | 9.539 2801 | 570 | 9.566 9964 | 649   | 0.433 0036 | 9.972 2836 | 77 | 50 |    |
|    | 20 | 9.539 3371 | 571 | 9.567 0613 | 648   | 0.432 9387 | 9.972 2759 | 78 | 40 |    |
|    | 30 | 9.539 3942 | 570 | 9.567 1261 | 648   | 0.432 8739 | 9.972 2681 | 77 | 30 |    |
|    | 40 | 9.539 4512 | 571 | 9.567 1909 | 648   | 0.432 8091 | 9.972 2603 | 78 | 20 |    |
|    | 50 | 9.539 5083 | 570 | 9.567 2557 | 648   | 0.432 7443 | 9.972 2526 | 77 | 10 |    |
| 16 | 0  | 9.539 5653 | 570 | 9.567 3205 | 648   | 0.432 6795 | 9.972 2448 | 78 | 0  | 44 |
|    | 10 | 9.539 6223 | 570 | 9.567 3853 | 648   | 0.432 6147 | 9.972 2370 | 78 | 50 |    |
|    | 20 | 9.539 6793 | 570 | 9.567 4501 | 647   | 0.432 5499 | 9.972 2292 | 77 | 40 |    |
|    | 30 | 9.539 7363 | 570 | 9.567 5148 | 648   | 0.432 4852 | 9.972 2215 | 78 | 30 |    |
|    | 40 | 9.539 7933 | 570 | 9.567 5796 | 648   | 0.432 4204 | 9.972 2137 | 77 | 20 |    |
|    | 50 | 9.539 8503 | 570 | 9.567 6444 | 647   | 0.432 3556 | 9.972 2059 | 78 | 10 |    |
| 17 | 0  | 9.539 9073 | 569 | 9.567 7091 | 648   | 0.432 2909 | 9.972 1981 | 78 | 0  | 43 |
|    | 10 | 9.539 9642 | 570 | 9.567 7739 | 647   | 0.432 2261 | 9.972 1903 | 77 | 50 |    |
|    | 20 | 9.540 0212 | 569 | 9.567 8386 | 648   | 0.432 1614 | 9.972 1826 | 78 | 40 |    |
|    | 30 | 9.540 0781 | 570 | 9.567 9034 | 647   | 0.432 0966 | 9.972 1748 | 77 | 30 |    |
|    | 40 | 9.540 1351 | 569 | 9.567 9681 | 647   | 0.432 0319 | 9.972 1670 | 78 | 20 |    |
|    | 50 | 9.540 1920 | 569 | 9.568 0328 | 647   | 0.431 9672 | 9.972 1592 | 77 | 10 |    |
| 18 | 0  | 9.540 2489 | 569 | 9.568 0975 | 647   | 0.431 9025 | 9.972 1514 | 78 | 0  | 42 |
|    | 10 | 9.540 3058 | 570 | 9.568 1622 | 647   | 0.431 8378 | 9.972 1436 | 78 | 50 |    |
|    | 20 | 9.540 3628 | 569 | 9.568 2269 | 647   | 0.431 7731 | 9.972 1358 | 77 | 40 |    |
|    | 30 | 9.540 4197 | 568 | 9.568 2916 | 647   | 0.431 7084 | 9.972 1280 | 78 | 30 |    |
|    | 40 | 9.540 4765 | 569 | 9.568 3563 | 647   | 0.431 6437 | 9.972 1202 | 77 | 20 |    |
|    | 50 | 9.540 5334 | 569 | 9.568 4210 | 646   | 0.431 5790 | 9.972 1125 | 78 | 10 |    |
| 19 | 0  | 9.540 5903 | 569 | 9.568 4856 | 647   | 0.431 5144 | 9.972 1047 | 78 | 0  | 41 |
|    | 10 | 9.540 6472 | 568 | 9.568 5503 | 646   | 0.431 4497 | 9.972 0969 | 77 | 50 |    |
|    | 20 | 9.540 7040 | 569 | 9.568 6149 | 647   | 0.431 3851 | 9.972 0891 | 78 | 40 |    |
|    | 30 | 9.540 7609 | 568 | 9.568 6796 | 646   | 0.431 3204 | 9.972 0813 | 77 | 30 |    |
|    | 40 | 9.540 8177 | 568 | 9.568 7442 | 647   | 0.431 2558 | 9.972 0735 | 78 | 20 |    |
|    | 50 | 9.540 8745 | 569 | 9.568 8089 | 646   | 0.431 1911 | 9.972 0657 | 77 | 10 |    |
| 20 | 0  | 9.540 9314 | 569 | 9.568 8735 | 646   | 0.431 1265 | 9.972 0579 | 78 | 0  | 40 |
|    |    |            |     |            |       |            |            |    |    |    |
|    | "  | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d. | "  |    |

649

1 64.9

2 129.8

3 194.7

4 259.6

5 324.5

6 389.4

7 454.3

8 519.2

9 584.1

647

1 64.7

2 129.4

3 194.1

4 258.8

5 323.5

6 388.2

7 452.9

8 517.6

9 582.3

573

1 57.3

2 114.6

3 171.9

4 229.2

5 286.5

6 343.8

7 401.1

8 458.4

9 515.7

571

1 57.1

2 114.2

3 171.3

4 228.4

5 285.5

6 342.6

7 399.7

8 456.8

9 513.9

569

1 56.9

2 113.8

3 170.7

4 227.6

5 284.5

6 341.4

7 398.3

8 455.2

9 512.1

78

1 7.8

2 15.6

3 23.4

4 31.2

5 39.0

6 46.8

7 54.6

8 62.4

9 70.2



| $\angle$ | $n$ | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d. | $n$ | $\angle$ |
|----------|-----|------------|-----|------------|-------|------------|------------|----|-----|----------|
| 645      | 0   | 9.540 9314 | 568 | 9.568 8735 | 646   | 0.431 1265 | 9.972 0579 | 78 | 0   | 40       |
| 1 64.5   | 10  | 9.541 0882 | 568 | 9.568 9381 | 646   | 0.431 0619 | 9.972 0501 | 78 | 50  |          |
| 2 120.0  | 20  | 9.541 0150 | 568 | 9.569 0127 | 646   | 0.431 0977 | 9.972 0423 | 78 | 40  |          |
| 3 104.5  | 30  | 9.541 1018 | 568 | 9.569 0674 | 646   | 0.431 0127 | 9.972 0345 | 79 | 30  |          |
| 4 158.0  | 40  | 9.541 1586 | 567 | 9.569 1319 | 646   | 0.431 0681 | 9.972 0266 | 78 | 20  |          |
| 5 124.5  | 50  | 9.541 2154 | 568 | 9.569 1965 | 646   | 0.431 0215 | 9.972 0188 | 78 | 10  |          |
| 6 187.0  | 0   | 9.541 2721 | 568 | 9.569 2611 | 646   | 0.431 0789 | 9.972 0110 | 78 | 0   | 39       |
| 7 451.5  | 10  | 9.541 3289 | 567 | 9.569 3257 | 645   | 0.431 0673 | 9.972 0032 | 78 | 50  |          |
| 8 416.0  | 20  | 9.541 3856 | 568 | 9.569 3902 | 646   | 0.431 0698 | 9.971 9954 | 78 | 40  |          |
| 9 180.5  | 30  | 9.541 4424 | 567 | 9.569 4548 | 645   | 0.431 0483 | 9.971 9876 | 78 | 30  |          |
|          | 40  | 9.541 4991 | 567 | 9.569 5194 | 645   | 0.431 0867 | 9.971 9798 | 78 | 20  |          |
|          | 50  | 9.541 5558 | 568 | 9.569 5840 | 646   | 0.431 0461 | 9.971 9720 | 78 | 10  |          |
| 049      | 0   | 9.541 6126 | 567 | 9.569 6484 | 645   | 0.431 0416 | 9.971 9642 | 79 | 0   | 38       |
| 1 64.3   | 10  | 9.541 6693 | 567 | 9.569 7129 | 646   | 0.431 0371 | 9.971 9564 | 78 | 50  |          |
| 2 128.0  | 20  | 9.541 7260 | 567 | 9.569 7775 | 645   | 0.431 0225 | 9.971 9485 | 78 | 40  |          |
| 3 187.5  | 30  | 9.541 7827 | 567 | 9.569 8421 | 645   | 0.431 0180 | 9.971 9407 | 78 | 30  |          |
| 4 121.5  | 40  | 9.541 8394 | 566 | 9.569 9065 | 645   | 0.431 0035 | 9.971 9329 | 78 | 20  |          |
| 5 385.8  | 50  | 9.541 8961 | 567 | 9.569 9710 | 645   | 0.431 0029 | 9.971 9251 | 79 | 10  |          |
| 6 450.2  | 0   | 9.541 9527 | 567 | 9.570 0355 | 645   | 0.429 9943 | 9.971 9173 | 79 | 0   | 37       |
| 7 514.4  | 10  | 9.542 0094 | 566 | 9.570 1000 | 644   | 0.429 9900 | 9.971 9094 | 78 | 50  |          |
| 8 578.7  | 20  | 9.542 0660 | 566 | 9.570 1644 | 644   | 0.429 9856 | 9.971 9016 | 78 | 40  |          |
|          | 30  | 9.542 1227 | 566 | 9.570 2289 | 645   | 0.429 9721 | 9.971 8938 | 79 | 30  |          |
|          | 40  | 9.542 1793 | 566 | 9.570 2934 | 644   | 0.429 9676 | 9.971 8859 | 78 | 20  |          |
|          | 50  | 9.542 2359 | 567 | 9.570 3578 | 645   | 0.429 9632 | 9.971 8781 | 78 | 10  |          |
| 008      | 0   | 9.542 2926 | 566 | 9.570 4224 | 644   | 0.429 9577 | 9.971 8703 | 79 | 0   | 36       |
| 1 56.8   | 10  | 9.542 3492 | 566 | 9.570 4869 | 645   | 0.429 9433 | 9.971 8624 | 78 | 50  |          |
| 2 121.6  | 20  | 9.542 4058 | 566 | 9.570 5512 | 644   | 0.429 9388 | 9.971 8546 | 78 | 40  |          |
| 3 184.0  | 30  | 9.542 4624 | 566 | 9.570 6156 | 644   | 0.429 9344 | 9.971 8468 | 79 | 30  |          |
| 4 227.3  | 40  | 9.542 5190 | 565 | 9.570 6800 | 644   | 0.429 9200 | 9.971 8389 | 78 | 20  |          |
| 5 84.0   | 50  | 9.542 5755 | 566 | 9.570 7444 | 644   | 0.429 9156 | 9.971 8311 | 78 | 10  |          |
| 6 140.8  | 0   | 9.542 6321 | 566 | 9.570 8088 | 644   | 0.429 9112 | 9.971 8233 | 79 | 0   | 35       |
| 7 454.4  | 10  | 9.542 6887 | 565 | 9.570 8733 | 644   | 0.429 9068 | 9.971 8154 | 78 | 50  |          |
| 8 513.2  | 20  | 9.542 7453 | 566 | 9.570 9376 | 644   | 0.429 9024 | 9.971 8076 | 78 | 40  |          |
|          | 30  | 9.542 8018 | 565 | 9.571 0020 | 644   | 0.428 8980 | 9.971 7998 | 79 | 30  |          |
|          | 40  | 9.542 8584 | 565 | 9.571 0664 | 644   | 0.428 8936 | 9.971 7919 | 79 | 20  |          |
|          | 50  | 9.542 9149 | 565 | 9.571 1308 | 643   | 0.428 8892 | 9.971 7841 | 79 | 10  |          |
| 060      | 0   | 9.542 9715 | 566 | 9.571 1951 | 644   | 0.428 8849 | 9.971 7763 | 78 | 0   | 34       |
| 1 56.6   | 10  | 9.543 0279 | 565 | 9.571 2595 | 643   | 0.428 8705 | 9.971 7684 | 79 | 50  |          |
| 2 121.2  | 20  | 9.543 0843 | 564 | 9.571 3238 | 644   | 0.428 8662 | 9.971 7606 | 78 | 40  |          |
| 3 180.8  | 30  | 9.543 1408 | 564 | 9.571 3882 | 644   | 0.428 8618 | 9.971 7527 | 79 | 30  |          |
| 4 226.4  | 40  | 9.543 1974 | 564 | 9.571 4526 | 644   | 0.428 8575 | 9.971 7448 | 79 | 20  |          |
| 5 88.0   | 50  | 9.543 2538 | 565 | 9.571 5169 | 644   | 0.428 8532 | 9.971 7369 | 78 | 10  |          |
| 6 140.2  | 0   | 9.543 3103 | 564 | 9.571 5811 | 643   | 0.428 8489 | 9.971 7291 | 78 | 0   | 33       |
| 7 451.8  | 10  | 9.543 3667 | 565 | 9.571 6455 | 644   | 0.428 8445 | 9.971 7213 | 79 | 50  |          |
| 8 510.4  | 20  | 9.543 4232 | 564 | 9.571 7098 | 643   | 0.428 8402 | 9.971 7134 | 78 | 40  |          |
|          | 30  | 9.543 4796 | 564 | 9.571 7741 | 643   | 0.428 8359 | 9.971 7056 | 79 | 30  |          |
|          | 40  | 9.543 5361 | 564 | 9.571 8384 | 643   | 0.428 8316 | 9.971 6977 | 78 | 20  |          |
|          | 50  | 9.543 5925 | 564 | 9.571 9026 | 643   | 0.428 8273 | 9.971 6899 | 79 | 10  |          |
| 084      | 0   | 9.543 6489 | 564 | 9.571 9669 | 643   | 0.428 8230 | 9.971 6821 | 79 | 0   | 32       |
| 1 56.4   | 10  | 9.543 7053 | 564 | 9.572 0312 | 644   | 0.427 9686 | 9.971 6742 | 78 | 50  |          |
| 2 121.3  | 20  | 9.543 7617 | 564 | 9.572 0954 | 643   | 0.427 9643 | 9.971 6663 | 79 | 40  |          |
| 3 180.6  | 30  | 9.543 8181 | 564 | 9.572 1597 | 643   | 0.427 9600 | 9.971 6584 | 78 | 30  |          |
| 4 226.0  | 40  | 9.543 8745 | 564 | 9.572 2240 | 643   | 0.427 9557 | 9.971 6506 | 79 | 20  |          |
| 5 88.4   | 50  | 9.543 9309 | 564 | 9.572 2882 | 643   | 0.427 9514 | 9.971 6427 | 79 | 10  |          |
| 6 140.6  | 0   | 9.543 9873 | 563 | 9.572 3524 | 642   | 0.427 9471 | 9.971 6348 | 78 | 0   | 31       |
| 7 451.2  | 10  | 9.544 0436 | 564 | 9.572 4166 | 643   | 0.427 9428 | 9.971 6269 | 79 | 50  |          |
| 8 510.2  | 20  | 9.544 1000 | 563 | 9.572 4809 | 643   | 0.427 9385 | 9.971 6191 | 79 | 40  |          |
|          | 30  | 9.544 1563 | 563 | 9.572 5451 | 642   | 0.427 9342 | 9.971 6112 | 78 | 30  |          |
|          | 40  | 9.544 2126 | 564 | 9.572 6094 | 642   | 0.427 9299 | 9.971 6034 | 79 | 20  |          |
|          | 50  | 9.544 2690 | 563 | 9.572 6735 | 643   | 0.427 9256 | 9.971 5955 | 79 | 10  |          |
| 088      | 0   | 9.544 3253 | 563 | 9.572 7377 | 643   | 0.427 9213 | 9.971 5876 | 79 | 0   | 30       |
| 1 56.2   |     |            |     |            |       |            |            |    |     |          |
| 2 121.4  |     |            |     |            |       |            |            |    |     |          |
| 3 180.4  |     |            |     |            |       |            |            |    |     |          |
| 4 226.2  |     |            |     |            |       |            |            |    |     |          |
| 5 88.6   |     |            |     |            |       |            |            |    |     |          |
| 6 140.8  |     |            |     |            |       |            |            |    |     |          |
| 7 451.4  |     |            |     |            |       |            |            |    |     |          |
| 8 510.4  |     |            |     |            |       |            |            |    |     |          |



|    | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d. | "  |    |
|----|----|------------|-----|------------|-------|------------|------------|----|----|----|
| 30 | 0  | 9.544 3253 | 563 | 9.572 7377 | 642   | 0.427 2623 | 9.971 5876 | 78 | 0  | 30 |
|    | 10 | 9.544 3816 | 563 | 9.572 8019 | 641   | 0.427 1981 | 9.971 5798 | 79 | 50 |    |
|    | 20 | 9.544 4379 | 563 | 9.572 8660 | 642   | 0.427 1340 | 9.971 5719 | 79 | 40 |    |
|    | 30 | 9.544 4942 | 563 | 9.572 9302 | 642   | 0.427 0698 | 9.971 5640 | 79 | 30 |    |
|    | 40 | 9.544 5505 | 563 | 9.572 9944 | 641   | 0.427 0056 | 9.971 5561 | 78 | 20 |    |
|    | 50 | 9.544 6068 | 562 | 9.573 0585 | 642   | 0.426 9415 | 9.971 5483 | 79 | 10 |    |
| 31 | 0  | 9.544 6630 | 563 | 9.573 1227 | 641   | 0.426 8773 | 9.971 5404 | 79 | 0  | 29 |
|    | 10 | 9.544 7193 | 562 | 9.573 1868 | 641   | 0.426 8132 | 9.971 5325 | 79 | 50 |    |
|    | 20 | 9.544 7755 | 563 | 9.573 2509 | 642   | 0.426 7491 | 9.971 5246 | 79 | 40 |    |
|    | 30 | 9.544 8318 | 562 | 9.573 3151 | 641   | 0.426 6849 | 9.971 5167 | 79 | 30 |    |
|    | 40 | 9.544 8880 | 562 | 9.573 3792 | 641   | 0.426 6208 | 9.971 5088 | 78 | 20 |    |
|    | 50 | 9.544 9443 | 562 | 9.573 4433 | 641   | 0.426 5567 | 9.971 5010 | 79 | 10 |    |
| 32 | 0  | 9.545 0005 | 562 | 9.573 5074 | 641   | 0.426 4926 | 9.971 4931 | 79 | 0  | 28 |
|    | 10 | 9.545 0567 | 562 | 9.573 5715 | 641   | 0.426 4285 | 9.971 4852 | 79 | 50 |    |
|    | 20 | 9.545 1129 | 562 | 9.573 6356 | 641   | 0.426 3644 | 9.971 4773 | 79 | 40 |    |
|    | 30 | 9.545 1691 | 562 | 9.573 6997 | 640   | 0.426 3003 | 9.971 4694 | 79 | 30 |    |
|    | 40 | 9.545 2253 | 561 | 9.573 7637 | 641   | 0.426 2363 | 9.971 4615 | 79 | 20 |    |
|    | 50 | 9.545 2814 | 562 | 9.573 8278 | 641   | 0.426 1722 | 9.971 4536 | 79 | 10 |    |
| 33 | 0  | 9.545 3376 | 562 | 9.573 8919 | 640   | 0.426 1081 | 9.971 4457 | 79 | 0  | 27 |
|    | 10 | 9.545 3938 | 561 | 9.573 9559 | 641   | 0.426 0441 | 9.971 4378 | 79 | 50 |    |
|    | 20 | 9.545 4499 | 562 | 9.574 0200 | 640   | 0.425 9800 | 9.971 4299 | 78 | 40 |    |
|    | 30 | 9.545 5061 | 561 | 9.574 0840 | 641   | 0.425 9160 | 9.971 4221 | 79 | 30 |    |
|    | 40 | 9.545 5622 | 561 | 9.574 1481 | 640   | 0.425 8519 | 9.971 4142 | 79 | 20 |    |
|    | 50 | 9.545 6183 | 562 | 9.574 2121 | 640   | 0.425 7879 | 9.971 4063 | 79 | 10 |    |
| 34 | 0  | 9.545 6745 | 561 | 9.574 2761 | 640   | 0.425 7239 | 9.971 3984 | 79 | 0  | 26 |
|    | 10 | 9.545 7306 | 561 | 9.574 3401 | 640   | 0.425 6599 | 9.971 3905 | 79 | 50 |    |
|    | 20 | 9.545 7867 | 561 | 9.574 4041 | 640   | 0.425 5959 | 9.971 3826 | 79 | 40 |    |
|    | 30 | 9.545 8428 | 561 | 9.574 4681 | 640   | 0.425 5319 | 9.971 3747 | 80 | 30 |    |
|    | 40 | 9.545 8989 | 560 | 9.574 5321 | 640   | 0.425 4679 | 9.971 3667 | 79 | 20 |    |
|    | 50 | 9.545 9549 | 561 | 9.574 5961 | 640   | 0.425 4039 | 9.971 3588 | 79 | 10 |    |
| 35 | 0  | 9.546 0110 | 561 | 9.574 6601 | 639   | 0.425 3399 | 9.971 3509 | 79 | 0  | 25 |
|    | 10 | 9.546 0671 | 560 | 9.574 7240 | 640   | 0.425 2760 | 9.971 3430 | 79 | 50 |    |
|    | 20 | 9.546 1231 | 561 | 9.574 7880 | 640   | 0.425 2120 | 9.971 3351 | 79 | 40 |    |
|    | 30 | 9.546 1792 | 560 | 9.574 8520 | 639   | 0.425 1480 | 9.971 3272 | 79 | 30 |    |
|    | 40 | 9.546 2352 | 560 | 9.574 9159 | 639   | 0.425 0841 | 9.971 3193 | 79 | 20 |    |
|    | 50 | 9.546 2912 | 560 | 9.574 9798 | 640   | 0.425 0202 | 9.971 3114 | 79 | 10 |    |
| 36 | 0  | 9.546 3472 | 561 | 9.575 0438 | 639   | 0.424 9562 | 9.971 3035 | 79 | 0  | 24 |
|    | 10 | 9.546 4033 | 560 | 9.575 1077 | 639   | 0.424 8923 | 9.971 2956 | 80 | 50 |    |
|    | 20 | 9.546 4593 | 560 | 9.575 1716 | 639   | 0.424 8284 | 9.971 2876 | 79 | 40 |    |
|    | 30 | 9.546 5153 | 559 | 9.575 2355 | 639   | 0.424 7645 | 9.971 2797 | 79 | 30 |    |
|    | 40 | 9.546 5712 | 560 | 9.575 2994 | 639   | 0.424 7006 | 9.971 2718 | 79 | 20 |    |
|    | 50 | 9.546 6272 | 560 | 9.575 3633 | 639   | 0.424 6367 | 9.971 2639 | 79 | 10 |    |
| 37 | 0  | 9.546 6832 | 560 | 9.575 4272 | 639   | 0.424 5728 | 9.971 2560 | 80 | 0  | 23 |
|    | 10 | 9.546 7392 | 559 | 9.575 4911 | 639   | 0.424 5089 | 9.971 2480 | 79 | 50 |    |
|    | 20 | 9.546 7951 | 560 | 9.575 5550 | 639   | 0.424 4450 | 9.971 2401 | 79 | 40 |    |
|    | 30 | 9.546 8511 | 559 | 9.575 6189 | 638   | 0.424 3811 | 9.971 2322 | 79 | 30 |    |
|    | 40 | 9.546 9070 | 559 | 9.575 6827 | 639   | 0.424 3173 | 9.971 2243 | 80 | 20 |    |
|    | 50 | 9.546 9629 | 560 | 9.575 7466 | 638   | 0.424 2534 | 9.971 2163 | 79 | 10 |    |
| 38 | 0  | 9.547 0189 | 559 | 9.575 8104 | 639   | 0.424 1896 | 9.971 2084 | 79 | 0  | 22 |
|    | 10 | 9.547 0748 | 559 | 9.575 8743 | 638   | 0.424 1257 | 9.971 2005 | 79 | 50 |    |
|    | 20 | 9.547 1307 | 559 | 9.575 9381 | 638   | 0.424 0619 | 9.971 1926 | 80 | 40 |    |
|    | 30 | 9.547 1866 | 559 | 9.576 0019 | 639   | 0.423 9981 | 9.971 1846 | 79 | 30 |    |
|    | 40 | 9.547 2425 | 558 | 9.576 0658 | 638   | 0.423 9342 | 9.971 1767 | 79 | 20 |    |
|    | 50 | 9.547 2983 | 559 | 9.576 1296 | 638   | 0.423 8704 | 9.971 1688 | 80 | 10 |    |
| 39 | 0  | 9.547 3542 | 559 | 9.576 1934 | 638   | 0.423 8066 | 9.971 1608 | 79 | 0  | 21 |
|    | 10 | 9.547 4101 | 558 | 9.576 2572 | 638   | 0.423 7428 | 9.971 1529 | 79 | 50 |    |
|    | 20 | 9.547 4659 | 559 | 9.576 3210 | 638   | 0.423 6790 | 9.971 1450 | 80 | 40 |    |
|    | 30 | 9.547 5218 | 558 | 9.576 3848 | 637   | 0.423 6152 | 9.971 1370 | 79 | 30 |    |
|    | 40 | 9.547 5776 | 558 | 9.576 4485 | 638   | 0.423 5515 | 9.971 1291 | 80 | 20 |    |
|    | 50 | 9.547 6334 | 559 | 9.576 5123 | 638   | 0.423 4877 | 9.971 1211 | 79 | 10 |    |
| 40 | 0  | 9.547 6893 | 559 | 9.576 5761 | 638   | 0.423 4239 | 9.971 1132 | 79 | 0  | 20 |

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7 55.3  
8 63.2  
9 71.1



| $\epsilon$ | $n$ | Sin        | d.  | Tang       | d. c. | Cotg       | Con        | d. | $n$ | $\epsilon$ |
|------------|-----|------------|-----|------------|-------|------------|------------|----|-----|------------|
| 639        | 0   | 9.547 6893 | 558 | 9.576 8761 | 647   | 0.424 4219 | 9.971 1132 | 79 | 0   | 20         |
|            | 10  | 9.547 7451 | 558 | 9.576 6398 | 648   | 0.424 4002 | 9.971 1051 | 80 | 50  |            |
|            | 20  | 9.547 8009 | 558 | 9.576 7046 | 647   | 0.424 3964 | 9.971 0971 | 81 | 40  |            |
|            | 30  | 9.547 8567 | 558 | 9.576 7671 | 648   | 0.424 3127 | 9.971 0891 | 82 | 30  |            |
|            | 40  | 9.547 9125 | 558 | 9.576 8111 | 647   | 0.424 1689 | 9.971 0814 | 83 | 20  |            |
| 640        | 50  | 9.547 9683 | 557 | 9.576 8948 | 647   | 0.424 1052 | 9.971 0715 | 84 | 10  |            |
| 641        | 0   | 9.548 0240 | 558 | 9.576 9585 | 647   | 0.424 0115 | 9.971 0655 | 79 | 0   | 19         |
| 642        | 10  | 9.548 0798 | 558 | 9.577 0222 | 647   | 0.424 9778 | 9.971 0576 | 80 | 50  |            |
| 643        | 20  | 9.548 1356 | 557 | 9.577 0859 | 647   | 0.424 9141 | 9.971 0496 | 81 | 40  |            |
| 644        | 30  | 9.548 1914 | 558 | 9.577 1496 | 647   | 0.424 8604 | 9.971 0417 | 82 | 30  |            |
| 645        | 40  | 9.548 2471 | 557 | 9.577 2133 | 647   | 0.424 7867 | 9.971 0337 | 83 | 20  |            |
| 646        | 50  | 9.548 3028 | 557 | 9.577 2770 | 647   | 0.424 7330 | 9.971 0258 | 84 | 10  |            |
| 647        | 0   | 9.548 3585 | 557 | 9.577 3407 | 647   | 0.424 6591 | 9.971 0178 | 79 | 0   | 18         |
| 648        | 10  | 9.548 4142 | 557 | 9.577 4044 | 646   | 0.424 5956 | 9.971 0099 | 80 | 50  |            |
| 649        | 20  | 9.548 4699 | 557 | 9.577 4680 | 647   | 0.424 5120 | 9.971 0019 | 81 | 40  |            |
| 650        | 30  | 9.548 5256 | 557 | 9.577 5317 | 647   | 0.424 4581 | 9.970 9939 | 82 | 30  |            |
| 651        | 40  | 9.548 5811 | 557 | 9.577 5954 | 646   | 0.424 4040 | 9.970 9860 | 83 | 20  |            |
| 652        | 50  | 9.548 6370 | 557 | 9.577 6590 | 646   | 0.424 3103 | 9.970 9780 | 84 | 10  |            |
| 653        | 0   | 9.548 6927 | 557 | 9.577 7226 | 647   | 0.424 2774 | 9.970 9701 | 79 | 0   | 17         |
| 654        | 10  | 9.548 7484 | 556 | 9.577 7863 | 646   | 0.424 2147 | 9.970 9621 | 80 | 50  |            |
| 655        | 20  | 9.548 8040 | 557 | 9.577 8500 | 646   | 0.424 1509 | 9.970 9541 | 81 | 40  |            |
| 656        | 30  | 9.548 8597 | 556 | 9.577 9137 | 646   | 0.424 0865 | 9.970 9462 | 82 | 30  |            |
| 657        | 40  | 9.548 9154 | 556 | 9.577 9773 | 646   | 0.424 0329 | 9.970 9382 | 83 | 20  |            |
| 658        | 50  | 9.549 9709 | 557 | 9.578 0410 | 646   | 0.424 0001 | 9.970 9303 | 84 | 10  |            |
| 659        | 0   | 9.549 0266 | 556 | 9.578 1047 | 646   | 0.424 0007 | 9.970 9223 | 79 | 0   | 16         |
| 660        | 10  | 9.549 0822 | 556 | 9.578 1684 | 646   | 0.424 1321 | 9.970 9144 | 80 | 50  |            |
| 661        | 20  | 9.549 1378 | 556 | 9.578 2321 | 646   | 0.424 0684 | 9.970 9064 | 81 | 40  |            |
| 662        | 30  | 9.549 1934 | 556 | 9.578 2958 | 645   | 0.424 0149 | 9.970 8984 | 82 | 30  |            |
| 663        | 40  | 9.549 2490 | 556 | 9.578 3595 | 645   | 0.424 0114 | 9.970 8904 | 83 | 20  |            |
| 664        | 50  | 9.549 3046 | 556 | 9.578 4232 | 646   | 0.424 0718 | 9.970 8824 | 84 | 10  |            |
| 665        | 0   | 9.549 3603 | 555 | 9.578 4869 | 645   | 0.424 0142 | 9.970 8744 | 79 | 0   | 15         |
| 666        | 10  | 9.549 4157 | 556 | 9.578 5506 | 645   | 0.424 4007 | 9.970 8664 | 80 | 50  |            |
| 667        | 20  | 9.549 4711 | 556 | 9.578 6143 | 646   | 0.424 3373 | 9.970 8585 | 81 | 40  |            |
| 668        | 30  | 9.549 5269 | 555 | 9.578 6780 | 646   | 0.424 2740 | 9.970 8505 | 82 | 30  |            |
| 669        | 40  | 9.549 5823 | 555 | 9.578 7417 | 645   | 0.424 2106 | 9.970 8425 | 83 | 20  |            |
| 670        | 50  | 9.549 6379 | 556 | 9.578 8054 | 645   | 0.424 1966 | 9.970 8345 | 84 | 10  |            |
| 671        | 0   | 9.549 6935 | 555 | 9.578 8690 | 645   | 0.424 1111 | 9.970 8265 | 79 | 0   | 14         |
| 672        | 10  | 9.549 7490 | 555 | 9.578 9327 | 645   | 0.424 0609 | 9.970 8185 | 80 | 50  |            |
| 673        | 20  | 9.549 8045 | 555 | 9.578 9964 | 645   | 0.424 0054 | 9.970 8105 | 81 | 40  |            |
| 674        | 30  | 9.549 8600 | 555 | 9.579 0601 | 645   | 0.424 0026 | 9.970 8026 | 82 | 30  |            |
| 675        | 40  | 9.549 9155 | 555 | 9.579 1239 | 645   | 0.424 0891 | 9.970 7946 | 83 | 20  |            |
| 676        | 50  | 9.549 9710 | 555 | 9.579 1876 | 645   | 0.424 0850 | 9.970 7866 | 84 | 10  |            |
| 677        | 0   | 9.550 0265 | 554 | 9.579 2513 | 644   | 0.424 0281 | 9.970 7786 | 79 | 0   | 13         |
| 678        | 10  | 9.550 0819 | 555 | 9.579 3151 | 645   | 0.424 0889 | 9.970 7706 | 80 | 50  |            |
| 679        | 20  | 9.550 1374 | 555 | 9.579 3788 | 644   | 0.424 0852 | 9.970 7626 | 81 | 40  |            |
| 680        | 30  | 9.550 1929 | 554 | 9.579 4425 | 645   | 0.424 0618 | 9.970 7546 | 82 | 30  |            |
| 681        | 40  | 9.550 2483 | 554 | 9.579 5062 | 644   | 0.424 0097 | 9.970 7466 | 83 | 20  |            |
| 682        | 50  | 9.550 3038 | 554 | 9.579 5699 | 645   | 0.424 0149 | 9.970 7386 | 84 | 10  |            |
| 683        | 0   | 9.550 3592 | 554 | 9.579 6336 | 644   | 0.424 0114 | 9.970 7306 | 79 | 0   | 12         |
| 684        | 10  | 9.550 4146 | 554 | 9.579 6973 | 644   | 0.424 3080 | 9.970 7226 | 80 | 50  |            |
| 685        | 20  | 9.550 4700 | 554 | 9.579 7610 | 644   | 0.424 2446 | 9.970 7146 | 81 | 40  |            |
| 686        | 30  | 9.550 5254 | 554 | 9.579 8247 | 644   | 0.424 1811 | 9.970 7066 | 82 | 30  |            |
| 687        | 40  | 9.550 5808 | 554 | 9.579 8884 | 644   | 0.424 1178 | 9.970 6986 | 83 | 20  |            |
| 688        | 50  | 9.550 6362 | 554 | 9.579 9521 | 644   | 0.424 0544 | 9.970 6906 | 84 | 10  |            |
| 689        | 0   | 9.550 6916 | 554 | 9.580 0158 | 644   | 0.419 9910 | 9.970 6826 | 79 | 0   | 11         |
| 690        | 10  | 9.550 7470 | 554 | 9.580 0795 | 644   | 0.419 9276 | 9.970 6746 | 80 | 50  |            |
| 691        | 20  | 9.550 8024 | 553 | 9.580 1432 | 644   | 0.419 8641 | 9.970 6666 | 81 | 40  |            |
| 692        | 30  | 9.550 8577 | 553 | 9.580 2069 | 644   | 0.419 8009 | 9.970 6586 | 82 | 30  |            |
| 693        | 40  | 9.550 9131 | 553 | 9.580 2706 | 644   | 0.419 7375 | 9.970 6506 | 83 | 20  |            |
| 694        | 50  | 9.550 9684 | 553 | 9.580 3343 | 644   | 0.419 6741 | 9.970 6426 | 84 | 10  |            |
| 695        | 0   | 9.551 0237 | 553 | 9.580 3980 | 644   | 0.419 6108 | 9.970 6346 | 79 | 0   | 10         |



|    | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d. | "  | '  |
|----|----|------------|-----|------------|-------|------------|------------|----|----|----|
| 50 | 0  | 9.551 0237 | 554 | 9.580 3892 | 633   | 0.419 6108 | 9.970 6346 | 80 | 0  | 10 |
|    | 10 | 9.551 0791 | 553 | 9.580 4525 | 633   | 0.419 5475 | 9.970 6266 | 81 | 50 |    |
|    | 20 | 9.551 1344 | 553 | 9.580 5158 | 634   | 0.419 4842 | 9.970 6185 | 80 | 40 |    |
|    | 30 | 9.551 1897 | 553 | 9.580 5792 | 633   | 0.419 4208 | 9.970 6105 | 80 | 30 |    |
|    | 40 | 9.551 2450 | 553 | 9.580 6425 | 633   | 0.419 3575 | 9.970 6025 | 80 | 20 |    |
|    | 50 | 9.551 3003 | 553 | 9.580 7058 | 633   | 0.419 2942 | 9.970 5945 | 80 | 10 |    |
| 51 | 0  | 9.551 3556 | 553 | 9.580 7691 | 633   | 0.419 2309 | 9.970 5865 | 80 | 0  | 9  |
|    | 10 | 9.551 4109 | 552 | 9.580 8324 | 633   | 0.419 1676 | 9.970 5785 | 81 | 50 |    |
|    | 20 | 9.551 4661 | 553 | 9.580 8957 | 633   | 0.419 1043 | 9.970 5704 | 80 | 40 |    |
|    | 30 | 9.551 5214 | 553 | 9.580 9590 | 633   | 0.419 0410 | 9.970 5624 | 80 | 30 |    |
|    | 40 | 9.551 5767 | 552 | 9.581 0223 | 632   | 0.418 9777 | 9.970 5544 | 80 | 20 |    |
|    | 50 | 9.551 6319 | 552 | 9.581 0855 | 633   | 0.418 9145 | 9.970 5464 | 81 | 10 |    |
| 52 | 0  | 9.551 6871 | 553 | 9.581 1488 | 633   | 0.418 8512 | 9.970 5383 | 80 | 0  | 8  |
|    | 10 | 9.551 7424 | 552 | 9.581 2121 | 632   | 0.418 7879 | 9.970 5303 | 80 | 50 |    |
|    | 20 | 9.551 7976 | 552 | 9.581 2753 | 632   | 0.418 7247 | 9.970 5223 | 80 | 40 |    |
|    | 30 | 9.551 8528 | 552 | 9.581 3385 | 633   | 0.418 6615 | 9.970 5143 | 81 | 30 |    |
|    | 40 | 9.551 9080 | 552 | 9.581 4018 | 632   | 0.418 5982 | 9.970 5062 | 80 | 20 |    |
|    | 50 | 9.551 9632 | 552 | 9.581 4650 | 632   | 0.418 5350 | 9.970 4982 | 80 | 10 |    |
| 53 | 0  | 9.552 0184 | 552 | 9.581 5282 | 633   | 0.418 4718 | 9.970 4902 | 81 | 0  | 7  |
|    | 10 | 9.552 0736 | 552 | 9.581 5915 | 632   | 0.418 4085 | 9.970 4821 | 80 | 50 |    |
|    | 20 | 9.552 1288 | 551 | 9.581 6547 | 632   | 0.418 3453 | 9.970 4741 | 80 | 40 |    |
|    | 30 | 9.552 1839 | 552 | 9.581 7179 | 632   | 0.418 2821 | 9.970 4661 | 81 | 30 |    |
|    | 40 | 9.552 2391 | 551 | 9.581 7811 | 631   | 0.418 2189 | 9.970 4580 | 80 | 20 |    |
|    | 50 | 9.552 2942 | 552 | 9.581 8442 | 632   | 0.418 1558 | 9.970 4500 | 81 | 10 |    |
| 54 | 0  | 9.552 3494 | 551 | 9.581 9074 | 632   | 0.418 0926 | 9.970 4419 | 80 | 0  | 6  |
|    | 10 | 9.552 4045 | 551 | 9.581 9706 | 632   | 0.418 0294 | 9.970 4339 | 80 | 50 |    |
|    | 20 | 9.552 4596 | 552 | 9.582 0338 | 631   | 0.417 9662 | 9.970 4259 | 81 | 40 |    |
|    | 30 | 9.552 5148 | 551 | 9.582 0969 | 632   | 0.417 9031 | 9.970 4178 | 80 | 30 |    |
|    | 40 | 9.552 5699 | 551 | 9.582 1601 | 631   | 0.417 8399 | 9.970 4098 | 81 | 20 |    |
|    | 50 | 9.552 6250 | 551 | 9.582 2232 | 632   | 0.417 7768 | 9.970 4017 | 80 | 10 |    |
| 55 | 0  | 9.552 6801 | 550 | 9.582 2864 | 631   | 0.417 7136 | 9.970 3937 | 81 | 0  | 5  |
|    | 10 | 9.552 7351 | 551 | 9.582 3495 | 631   | 0.417 6505 | 9.970 3856 | 80 | 50 |    |
|    | 20 | 9.552 7902 | 551 | 9.582 4126 | 632   | 0.417 5874 | 9.970 3776 | 81 | 40 |    |
|    | 30 | 9.552 8453 | 551 | 9.582 4758 | 631   | 0.417 5242 | 9.970 3695 | 80 | 30 |    |
|    | 40 | 9.552 9004 | 550 | 9.582 5389 | 631   | 0.417 4611 | 9.970 3615 | 81 | 20 |    |
|    | 50 | 9.552 9554 | 551 | 9.582 6020 | 631   | 0.417 3980 | 9.970 3534 | 80 | 10 |    |
| 56 | 0  | 9.553 0105 | 550 | 9.582 6651 | 631   | 0.417 3349 | 9.970 3454 | 81 | 0  | 4  |
|    | 10 | 9.553 0655 | 550 | 9.582 7282 | 631   | 0.417 2718 | 9.970 3373 | 80 | 50 |    |
|    | 20 | 9.553 1205 | 550 | 9.582 7913 | 630   | 0.417 2087 | 9.970 3293 | 81 | 40 |    |
|    | 30 | 9.553 1755 | 551 | 9.582 8543 | 631   | 0.417 1457 | 9.970 3212 | 80 | 30 |    |
|    | 40 | 9.553 2306 | 550 | 9.582 9174 | 631   | 0.417 0826 | 9.970 3132 | 81 | 20 |    |
|    | 50 | 9.553 2856 | 550 | 9.582 9805 | 630   | 0.417 0195 | 9.970 3051 | 81 | 10 |    |
| 57 | 0  | 9.553 3406 | 550 | 9.583 0435 | 631   | 0.416 9565 | 9.970 2970 | 80 | 0  | 3  |
|    | 10 | 9.553 3956 | 549 | 9.583 1066 | 630   | 0.416 8934 | 9.970 2890 | 81 | 50 |    |
|    | 20 | 9.553 4505 | 550 | 9.583 1696 | 631   | 0.416 8304 | 9.970 2809 | 81 | 40 |    |
|    | 30 | 9.553 5055 | 550 | 9.583 2327 | 630   | 0.416 7673 | 9.970 2728 | 80 | 30 |    |
|    | 40 | 9.553 5605 | 549 | 9.583 2957 | 630   | 0.416 7043 | 9.970 2648 | 81 | 20 |    |
|    | 50 | 9.553 6154 | 550 | 9.583 3587 | 630   | 0.416 6413 | 9.970 2567 | 81 | 10 |    |
| 58 | 0  | 9.553 6704 | 549 | 9.583 4217 | 631   | 0.416 5783 | 9.970 2486 | 80 | 0  | 2  |
|    | 10 | 9.553 7253 | 550 | 9.583 4848 | 630   | 0.416 5152 | 9.970 2406 | 81 | 50 |    |
|    | 20 | 9.553 7803 | 549 | 9.583 5478 | 630   | 0.416 4522 | 9.970 2325 | 81 | 40 |    |
|    | 30 | 9.553 8352 | 549 | 9.583 6108 | 629   | 0.416 3892 | 9.970 2244 | 80 | 30 |    |
|    | 40 | 9.553 8901 | 549 | 9.583 6737 | 630   | 0.416 3263 | 9.970 2164 | 81 | 20 |    |
|    | 50 | 9.553 9450 | 549 | 9.583 7367 | 630   | 0.416 2633 | 9.970 2083 | 81 | 10 |    |
| 59 | 0  | 9.553 9999 | 549 | 9.583 7997 | 630   | 0.416 2003 | 9.970 2002 | 81 | 0  | 1  |
|    | 10 | 9.554 0548 | 549 | 9.583 8627 | 629   | 0.416 1373 | 9.970 1921 | 80 | 50 |    |
|    | 20 | 9.554 1097 | 549 | 9.583 9256 | 630   | 0.416 0744 | 9.970 1841 | 81 | 40 |    |
|    | 30 | 9.554 1646 | 548 | 9.583 9886 | 629   | 0.416 0114 | 9.970 1760 | 81 | 30 |    |
|    | 40 | 9.554 2194 | 549 | 9.584 0515 | 630   | 0.415 9485 | 9.970 1679 | 81 | 20 |    |
|    | 50 | 9.554 2743 | 549 | 9.584 1145 | 629   | 0.415 8855 | 9.970 1598 | 81 | 10 |    |
| 60 | 0  | 9.554 3292 |     | 9.584 1774 |       | 0.415 8226 | 9.970 1517 |    | 0  | 0  |
|    | "  | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d. | "  | '  |

632

1 63.1

2 126.4

3 189.6

4 252.8

5 316.0

6 379.2

7 442.4

8 505.6

9 568.8

629

1 62.9

2 125.8

3 188.7

4 251.6

5 314.5

6 377.4

7 440.3

8 503.2

9 566.1

552

1 55.2

2 110.4

3 165.6

4 220.8

5 276.0

6 331.2

7 386.4

8 441.6

9 496.8

550

1 55.0

2 110.0

3 165.0

4 220.0

5 275.0

6 330.0

7 385.0

8 440.0

9 495.0

548

1 54.8

2 109.6

3 164.4

4 219.2

5 274.0

6 328.8

7 383.6

8 438.4

9 493.2

81

1 8.1

2 16.2

3 24.3

4 32.4

5 40.5

6 48.6

7 56.7

8 64.8

9 72.9



[illegible]



|    | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d. | "  | '  |
|----|----|------------|-----|------------|-------|------------|------------|----|----|----|
| 10 | o  | 9.557 6060 | 543 | 9.587 9413 | 625   | 0.412 0587 | 9.969 6647 | 82 | o  | 50 |
|    | 10 | 9.557 6603 | 544 | 9.588 0038 | 625   | 0.411 9962 | 9.969 6565 | 81 | 50 |    |
|    | 20 | 9.557 7147 | 544 | 9.588 0663 | 625   | 0.411 9337 | 9.969 6484 | 82 | 40 |    |
|    | 30 | 9.557 7691 | 544 | 9.588 1288 | 625   | 0.411 8712 | 9.969 6402 | 81 | 30 |    |
|    | 40 | 9.557 8234 | 543 | 9.588 1913 | 625   | 0.411 8087 | 9.969 6321 | 82 | 20 |    |
|    | 50 | 9.557 8778 | 544 | 9.588 2538 | 625   | 0.411 7462 | 9.969 6239 | 81 | 10 |    |
| 11 | o  | 9.557 9321 | 543 | 9.588 3163 | 625   | 0.411 6837 | 9.969 6158 | 82 | o  | 49 |
|    | 10 | 9.557 9864 | 543 | 9.588 3788 | 625   | 0.411 6212 | 9.969 6076 | 82 | 50 |    |
|    | 20 | 9.558 0407 | 543 | 9.588 4413 | 625   | 0.411 5587 | 9.969 5994 | 81 | 40 |    |
|    | 30 | 9.558 0950 | 543 | 9.588 5038 | 624   | 0.411 4962 | 9.969 5913 | 82 | 30 |    |
|    | 40 | 9.558 1493 | 543 | 9.588 5662 | 625   | 0.411 4338 | 9.969 5831 | 82 | 20 |    |
|    | 50 | 9.558 2036 | 543 | 9.588 6287 | 625   | 0.411 3713 | 9.969 5749 | 81 | 10 |    |
| 12 | o  | 9.558 2579 | 543 | 9.588 6912 | 624   | 0.411 3088 | 9.969 5668 | 82 | o  | 48 |
|    | 10 | 9.558 3122 | 543 | 9.588 7536 | 624   | 0.411 2464 | 9.969 5586 | 82 | 50 |    |
|    | 20 | 9.558 3665 | 542 | 9.588 8160 | 625   | 0.411 1840 | 9.969 5504 | 81 | 40 |    |
|    | 30 | 9.558 4207 | 543 | 9.588 8785 | 624   | 0.411 1215 | 9.969 5423 | 82 | 30 |    |
|    | 40 | 9.558 4750 | 543 | 9.588 9409 | 624   | 0.411 0591 | 9.969 5341 | 82 | 20 |    |
|    | 50 | 9.558 5293 | 542 | 9.589 0033 | 624   | 0.410 9967 | 9.969 5259 | 82 | 10 |    |
| 13 | o  | 9.558 5835 | 542 | 9.589 0657 | 624   | 0.410 9343 | 9.969 5177 | 81 | o  | 47 |
|    | 10 | 9.558 6377 | 542 | 9.589 1281 | 624   | 0.410 8719 | 9.969 5096 | 82 | 50 |    |
|    | 20 | 9.558 6919 | 542 | 9.589 1905 | 624   | 0.410 8095 | 9.969 5014 | 82 | 40 |    |
|    | 30 | 9.558 7462 | 542 | 9.589 2529 | 624   | 0.410 7471 | 9.969 4932 | 82 | 30 |    |
|    | 40 | 9.558 8004 | 542 | 9.589 3153 | 624   | 0.410 6847 | 9.969 4850 | 81 | 20 |    |
|    | 50 | 9.558 8546 | 542 | 9.589 3777 | 624   | 0.410 6223 | 9.969 4769 | 82 | 10 |    |
| 14 | o  | 9.558 9088 | 542 | 9.589 4401 | 624   | 0.410 5599 | 9.969 4687 | 82 | o  | 46 |
|    | 10 | 9.558 9630 | 541 | 9.589 5025 | 623   | 0.410 4975 | 9.969 4605 | 82 | 50 |    |
|    | 20 | 9.559 0171 | 542 | 9.589 5648 | 624   | 0.410 4352 | 9.969 4523 | 82 | 40 |    |
|    | 30 | 9.559 0713 | 542 | 9.589 6272 | 623   | 0.410 3728 | 9.969 4441 | 81 | 30 |    |
|    | 40 | 9.559 1255 | 541 | 9.589 6895 | 624   | 0.410 3105 | 9.969 4360 | 82 | 20 |    |
|    | 50 | 9.559 1796 | 542 | 9.589 7519 | 623   | 0.410 2481 | 9.969 4278 | 82 | 10 |    |
| 15 | o  | 9.559 2338 | 541 | 9.589 8142 | 623   | 0.410 1858 | 9.969 4196 | 82 | o  | 45 |
|    | 10 | 9.559 2879 | 541 | 9.589 8765 | 623   | 0.410 1235 | 9.969 4114 | 82 | 50 |    |
|    | 20 | 9.559 3420 | 542 | 9.589 9388 | 624   | 0.410 0612 | 9.969 4032 | 82 | 40 |    |
|    | 30 | 9.559 3962 | 541 | 9.590 0012 | 623   | 0.409 9988 | 9.969 3950 | 82 | 30 |    |
|    | 40 | 9.559 4503 | 541 | 9.590 0635 | 623   | 0.409 9365 | 9.969 3868 | 82 | 20 |    |
|    | 50 | 9.559 5044 | 541 | 9.590 1258 | 623   | 0.409 8742 | 9.969 3786 | 82 | 10 |    |
| 16 | o  | 9.559 5585 | 541 | 9.590 1881 | 622   | 0.409 8119 | 9.969 3704 | 82 | o  | 44 |
|    | 10 | 9.559 6126 | 541 | 9.590 2503 | 623   | 0.409 7497 | 9.969 3622 | 82 | 50 |    |
|    | 20 | 9.559 6667 | 540 | 9.590 3126 | 623   | 0.409 6874 | 9.969 3540 | 82 | 40 |    |
|    | 30 | 9.559 7207 | 541 | 9.590 3749 | 623   | 0.409 6251 | 9.969 3458 | 82 | 30 |    |
|    | 40 | 9.559 7748 | 541 | 9.590 4372 | 622   | 0.409 5628 | 9.969 3376 | 82 | 20 |    |
|    | 50 | 9.559 8289 | 540 | 9.590 4994 | 623   | 0.409 5006 | 9.969 3294 | 82 | 10 |    |
| 17 | o  | 9.559 8829 | 541 | 9.590 5617 | 622   | 0.409 4383 | 9.969 3212 | 82 | o  | 43 |
|    | 10 | 9.559 9370 | 540 | 9.590 6239 | 623   | 0.409 3761 | 9.969 3130 | 82 | 50 |    |
|    | 20 | 9.559 9910 | 540 | 9.590 6862 | 622   | 0.409 3138 | 9.969 3048 | 82 | 40 |    |
|    | 30 | 9.560 0450 | 540 | 9.590 7484 | 622   | 0.409 2516 | 9.969 2966 | 82 | 30 |    |
|    | 40 | 9.560 0991 | 541 | 9.590 8106 | 623   | 0.409 1894 | 9.969 2884 | 82 | 20 |    |
|    | 50 | 9.560 1531 | 540 | 9.590 8729 | 622   | 0.409 1271 | 9.969 2802 | 82 | 10 |    |
| 18 | o  | 9.560 2071 | 540 | 9.590 9351 | 622   | 0.409 0649 | 9.969 2720 | 82 | o  | 42 |
|    | 10 | 9.560 2611 | 540 | 9.590 9973 | 622   | 0.409 0027 | 9.969 2638 | 82 | 50 |    |
|    | 20 | 9.560 3151 | 540 | 9.591 0595 | 622   | 0.408 9405 | 9.969 2556 | 82 | 40 |    |
|    | 30 | 9.560 3691 | 540 | 9.591 1217 | 622   | 0.408 8783 | 9.969 2474 | 82 | 30 |    |
|    | 40 | 9.560 4230 | 539 | 9.591 1839 | 622   | 0.408 8161 | 9.969 2392 | 83 | 20 |    |
|    | 50 | 9.560 4770 | 540 | 9.591 2461 | 621   | 0.408 7539 | 9.969 2309 | 82 | 10 |    |
| 19 | o  | 9.560 5310 | 539 | 9.591 3082 | 622   | 0.408 6918 | 9.969 2227 | 82 | o  | 41 |
|    | 10 | 9.560 5849 | 540 | 9.591 3704 | 622   | 0.408 6296 | 9.969 2145 | 82 | 50 |    |
|    | 20 | 9.560 6389 | 540 | 9.591 4326 | 621   | 0.408 5674 | 9.969 2063 | 82 | 40 |    |
|    | 30 | 9.560 6928 | 539 | 9.591 4947 | 622   | 0.408 5053 | 9.969 1981 | 82 | 30 |    |
|    | 40 | 9.560 7467 | 539 | 9.591 5569 | 621   | 0.408 4431 | 9.969 1899 | 83 | 20 |    |
|    | 50 | 9.560 8007 | 540 | 9.591 6190 | 622   | 0.408 3810 | 9.969 1816 | 82 | 10 |    |
| 20 | o  | 9.560 8546 | 539 | 9.591 6812 | 622   | 0.408 3188 | 9.969 1734 | 82 | o  | 40 |
|    | "  | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d. | "  | '  |

628

1 62.3

2 124.6

3 186.9

4 249.2

5 311.5

6 373.8

7 436.1

8 498.4

9 560.7

621

1 62.1

2 124.2

3 186.3

4 248.4

5 310.5

6 372.6

7 434.7

8 496.8

9 558.9

544

1 54.4

2 108.8

3 163.2

4 217.6

5 272.0

6 326.4

7 380.8

8 435.2

9 489.6

542

1 54.2

2 108.4

3 162.6

4 216.8

5 271.0

6 325.2

7 379.4

8 433.6

9 487.8

540

1 54.0

2 108.0

3 162.0

4 216.0

5 270.0

6 324.0

7 378.0

8 432.0

9 486.0

82

1 8.2

2 16.4

3 24.6

4 32.8

5 41.0

6 49.2

7 57.4

8 65.6

9 73.8



|         |    | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d. |    |    |
|---------|----|------------|-----|------------|-------|------------|------------|----|----|----|
| 621     | 0  | 9.560 8546 | 539 | 9.591 6812 | 621   | 0.408 3188 | 9.969 1734 | 82 | 0  | 40 |
| 1 61.1  | 10 | 9.560 9085 | 539 | 9.591 7433 | 621   | 0.408 2567 | 9.969 1652 | 82 | 50 |    |
| 2 124.2 | 20 | 9.560 9624 | 539 | 9.591 8054 | 621   | 0.408 1946 | 9.969 1570 | 82 | 40 |    |
| 3 185.3 | 30 | 9.561 0163 | 539 | 9.591 8675 | 622   | 0.408 1325 | 9.969 1487 | 82 | 30 |    |
| 4 246.4 | 40 | 9.561 0702 | 538 | 9.591 9297 | 621   | 0.408 0703 | 9.969 1405 | 82 | 20 |    |
| 5 310.5 | 50 | 9.561 1240 | 538 | 9.591 9918 | 621   | 0.408 0082 | 9.969 1323 | 82 | 10 |    |
| 6 371.6 | 0  | 9.561 1779 | 539 | 9.592 0539 | 620   | 0.407 9461 | 9.969 1241 | 83 | 0  | 39 |
| 7 434.7 | 10 | 9.561 2318 | 538 | 9.592 1159 | 621   | 0.407 8841 | 9.969 1158 | 82 | 50 |    |
| 8 496.8 | 20 | 9.561 2856 | 539 | 9.592 1780 | 621   | 0.407 8220 | 9.969 1076 | 82 | 40 |    |
| 9 558.9 | 30 | 9.561 3395 | 539 | 9.592 2401 | 621   | 0.407 7599 | 9.969 0994 | 82 | 30 |    |
|         | 40 | 9.561 3933 | 538 | 9.592 3022 | 621   | 0.407 6978 | 9.969 0911 | 82 | 20 |    |
|         | 50 | 9.561 4471 | 539 | 9.592 3643 | 620   | 0.407 6357 | 9.969 0829 | 82 | 10 |    |
| 619     | 0  | 9.561 5010 | 538 | 9.592 4263 | 621   | 0.407 5737 | 9.969 0746 | 82 | 0  | 38 |
| 1 161.9 | 10 | 9.561 5548 | 538 | 9.592 4884 | 620   | 0.407 5116 | 9.969 0664 | 82 | 50 |    |
| 2 223.8 | 20 | 9.561 6086 | 538 | 9.592 5504 | 620   | 0.407 4496 | 9.969 0582 | 82 | 40 |    |
| 3 285.7 | 30 | 9.561 6624 | 538 | 9.592 6124 | 621   | 0.407 3876 | 9.969 0499 | 82 | 30 |    |
| 4 347.6 | 40 | 9.561 7162 | 538 | 9.592 6745 | 620   | 0.407 3255 | 9.969 0417 | 82 | 20 |    |
| 5 409.5 | 50 | 9.561 7700 | 537 | 9.592 7365 | 620   | 0.407 2635 | 9.969 0334 | 82 | 10 |    |
| 6 471.4 | 0  | 9.561 8237 | 538 | 9.592 7985 | 620   | 0.407 2015 | 9.969 0252 | 82 | 0  | 37 |
| 7 533.3 | 10 | 9.561 8775 | 538 | 9.592 8605 | 621   | 0.407 1395 | 9.969 0170 | 82 | 50 |    |
| 8 595.2 | 20 | 9.561 9313 | 537 | 9.592 9226 | 620   | 0.407 0774 | 9.969 0087 | 82 | 40 |    |
| 9 657.1 | 30 | 9.561 9850 | 537 | 9.592 9846 | 619   | 0.407 0154 | 9.969 0005 | 82 | 30 |    |
|         | 40 | 9.562 0388 | 537 | 9.593 0465 | 620   | 0.406 9535 | 9.968 9922 | 82 | 20 |    |
|         | 50 | 9.562 0925 | 537 | 9.593 1085 | 620   | 0.406 8915 | 9.968 9840 | 82 | 10 |    |
| 539     | 0  | 9.562 1462 | 538 | 9.593 1705 | 620   | 0.406 8295 | 9.968 9757 | 82 | 0  | 36 |
| 1 53.9  | 10 | 9.562 2000 | 537 | 9.593 2325 | 620   | 0.406 7675 | 9.968 9675 | 82 | 50 |    |
| 2 107.8 | 20 | 9.562 2537 | 537 | 9.593 2945 | 620   | 0.406 7055 | 9.968 9592 | 82 | 40 |    |
| 3 169.7 | 30 | 9.562 3074 | 537 | 9.593 3564 | 620   | 0.406 6436 | 9.968 9510 | 82 | 30 |    |
| 4 231.6 | 40 | 9.562 3611 | 537 | 9.593 4184 | 619   | 0.406 5816 | 9.968 9427 | 82 | 20 |    |
| 5 293.5 | 50 | 9.562 4148 | 537 | 9.593 4803 | 620   | 0.406 5197 | 9.968 9344 | 82 | 10 |    |
| 6 355.4 | 0  | 9.562 4685 | 536 | 9.593 5423 | 619   | 0.406 4577 | 9.968 9262 | 82 | 0  | 35 |
| 7 417.3 | 10 | 9.562 5221 | 537 | 9.593 6042 | 619   | 0.406 3958 | 9.968 9179 | 82 | 50 |    |
| 8 479.2 | 20 | 9.562 5758 | 537 | 9.593 6661 | 620   | 0.406 3339 | 9.968 9097 | 82 | 40 |    |
| 9 541.1 | 30 | 9.562 6295 | 536 | 9.593 7281 | 619   | 0.406 2719 | 9.968 9014 | 82 | 30 |    |
|         | 40 | 9.562 6831 | 537 | 9.593 7900 | 619   | 0.406 2100 | 9.968 8931 | 82 | 20 |    |
|         | 50 | 9.562 7368 | 536 | 9.593 8519 | 619   | 0.406 1481 | 9.968 8849 | 82 | 10 |    |
| 537     | 0  | 9.562 7904 | 536 | 9.593 9138 | 619   | 0.406 0862 | 9.968 8766 | 82 | 0  | 34 |
| 1 53.7  | 10 | 9.562 8440 | 537 | 9.593 9757 | 619   | 0.406 0243 | 9.968 8683 | 82 | 50 |    |
| 2 107.4 | 20 | 9.562 8977 | 536 | 9.594 0376 | 619   | 0.405 9624 | 9.968 8601 | 82 | 40 |    |
| 3 169.1 | 30 | 9.562 9513 | 536 | 9.594 0995 | 618   | 0.405 9005 | 9.968 8518 | 82 | 30 |    |
| 4 230.8 | 40 | 9.563 0049 | 536 | 9.594 1613 | 619   | 0.405 8387 | 9.968 8435 | 82 | 20 |    |
| 5 292.5 | 50 | 9.563 0585 | 536 | 9.594 2232 | 619   | 0.405 7768 | 9.968 8353 | 82 | 10 |    |
| 6 354.2 | 0  | 9.563 1121 | 536 | 9.594 2851 | 618   | 0.405 7149 | 9.968 8270 | 82 | 0  | 33 |
| 7 415.9 | 10 | 9.563 1657 | 535 | 9.594 3469 | 619   | 0.405 6531 | 9.968 8187 | 82 | 50 |    |
| 8 477.6 | 20 | 9.563 2192 | 536 | 9.594 4088 | 618   | 0.405 5912 | 9.968 8105 | 82 | 40 |    |
| 9 539.3 | 30 | 9.563 2728 | 536 | 9.594 4706 | 619   | 0.405 5294 | 9.968 8022 | 82 | 30 |    |
|         | 40 | 9.563 3264 | 535 | 9.594 5325 | 618   | 0.405 4675 | 9.968 7939 | 82 | 20 |    |
|         | 50 | 9.563 3799 | 535 | 9.594 5943 | 618   | 0.405 4057 | 9.968 7856 | 82 | 10 |    |
| 535     | 0  | 9.563 4335 | 536 | 9.594 6561 | 618   | 0.405 3439 | 9.968 7773 | 82 | 0  | 32 |
| 1 53.5  | 10 | 9.563 4870 | 535 | 9.594 7179 | 619   | 0.405 2821 | 9.968 7691 | 82 | 50 |    |
| 2 107.0 | 20 | 9.563 5405 | 536 | 9.594 7798 | 618   | 0.405 2202 | 9.968 7608 | 82 | 40 |    |
| 3 168.5 | 30 | 9.563 5941 | 536 | 9.594 8416 | 618   | 0.405 1584 | 9.968 7525 | 82 | 30 |    |
| 4 230.0 | 40 | 9.563 6476 | 535 | 9.594 9034 | 618   | 0.405 0966 | 9.968 7442 | 82 | 20 |    |
| 5 291.5 | 50 | 9.563 7011 | 535 | 9.594 9652 | 617   | 0.405 0348 | 9.968 7359 | 82 | 10 |    |
| 6 353.0 | 0  | 9.563 7546 | 535 | 9.595 0269 | 618   | 0.404 9731 | 9.968 7276 | 82 | 0  | 31 |
| 7 414.5 | 10 | 9.563 8081 | 535 | 9.595 0887 | 618   | 0.404 9113 | 9.968 7194 | 82 | 50 |    |
| 8 476.0 | 20 | 9.563 8616 | 534 | 9.595 1505 | 618   | 0.404 8495 | 9.968 7111 | 82 | 40 |    |
| 9 537.5 | 30 | 9.563 9150 | 535 | 9.595 2123 | 617   | 0.404 7877 | 9.968 7028 | 82 | 30 |    |
|         | 40 | 9.563 9685 | 535 | 9.595 2740 | 618   | 0.404 7260 | 9.968 6945 | 82 | 20 |    |
|         | 50 | 9.564 0220 | 534 | 9.595 3358 | 617   | 0.404 6642 | 9.968 6862 | 82 | 10 |    |
| 82      | 0  | 9.564 0754 |     | 9.595 3975 |       | 0.404 6025 | 9.968 6779 | 82 | 0  | 30 |
| 1 8.1   |    |            |     |            |       |            |            |    |    |    |
| 2 16.4  |    |            |     |            |       |            |            |    |    |    |
| 3 24.6  |    |            |     |            |       |            |            |    |    |    |
| 4 32.8  |    |            |     |            |       |            |            |    |    |    |
| 5 41.0  |    |            |     |            |       |            |            |    |    |    |
| 6 49.2  |    |            |     |            |       |            |            |    |    |    |
| 7 57.4  |    |            |     |            |       |            |            |    |    |    |
| 8 65.6  |    |            |     |            |       |            |            |    |    |    |
| 9 73.8  |    |            |     |            |       |            |            |    |    |    |
|         |    | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d. |    |    |



|    | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d. | "  |    |
|----|----|------------|-----|------------|-------|------------|------------|----|----|----|
| 30 | 0  | 9.564 0754 | 535 | 9.595 3975 | 618   | 0.404 6025 | 9.968 6779 | 83 | 0  | 30 |
|    | 10 | 9.564 1289 | 534 | 9.595 4593 | 617   | 0.404 5407 | 9.968 6696 | 83 | 50 |    |
|    | 20 | 9.564 1823 | 535 | 9.595 5210 | 617   | 0.404 4790 | 9.968 6613 | 83 | 40 |    |
|    | 30 | 9.564 2358 | 534 | 9.595 5827 | 618   | 0.404 4173 | 9.968 6530 | 83 | 30 |    |
|    | 40 | 9.564 2892 | 534 | 9.595 6445 | 617   | 0.404 3555 | 9.968 6447 | 83 | 20 |    |
|    | 50 | 9.564 3426 | 534 | 9.595 7062 | 617   | 0.404 2938 | 9.968 6364 | 83 | 10 |    |
| 31 | 0  | 9.564 3960 | 534 | 9.595 7679 | 617   | 0.404 2321 | 9.968 6281 | 83 | 0  | 29 |
|    | 10 | 9.564 4494 | 534 | 9.595 8296 | 617   | 0.404 1704 | 9.968 6198 | 83 | 50 |    |
|    | 20 | 9.564 5028 | 534 | 9.595 8913 | 617   | 0.404 1087 | 9.968 6115 | 83 | 40 |    |
|    | 30 | 9.564 5562 | 534 | 9.595 9530 | 617   | 0.404 0470 | 9.968 6032 | 83 | 30 |    |
|    | 40 | 9.564 6096 | 534 | 9.596 0147 | 616   | 0.403 9853 | 9.968 5949 | 83 | 20 |    |
|    | 50 | 9.564 6629 | 534 | 9.596 0763 | 617   | 0.403 9237 | 9.968 5866 | 83 | 10 |    |
| 32 | 0  | 9.564 7163 | 534 | 9.596 1380 | 617   | 0.403 8620 | 9.968 5783 | 83 | 0  | 28 |
|    | 10 | 9.564 7697 | 533 | 9.596 1997 | 616   | 0.403 8003 | 9.968 5700 | 83 | 50 |    |
|    | 20 | 9.564 8230 | 534 | 9.596 2613 | 617   | 0.403 7387 | 9.968 5617 | 83 | 40 |    |
|    | 30 | 9.564 8764 | 533 | 9.596 3230 | 616   | 0.403 6770 | 9.968 5534 | 84 | 30 |    |
|    | 40 | 9.564 9297 | 533 | 9.596 3846 | 617   | 0.403 6154 | 9.968 5450 | 83 | 20 |    |
|    | 50 | 9.564 9830 | 533 | 9.596 4463 | 616   | 0.403 5537 | 9.968 5367 | 83 | 10 |    |
| 33 | 0  | 9.565 0363 | 533 | 9.596 5079 | 616   | 0.403 4921 | 9.968 5284 | 83 | 0  | 27 |
|    | 10 | 9.565 0896 | 533 | 9.596 5695 | 617   | 0.403 4305 | 9.968 5201 | 83 | 50 |    |
|    | 20 | 9.565 1429 | 533 | 9.596 6312 | 616   | 0.403 3688 | 9.968 5118 | 83 | 40 |    |
|    | 30 | 9.565 1962 | 533 | 9.596 6928 | 616   | 0.403 3072 | 9.968 5035 | 83 | 30 |    |
|    | 40 | 9.565 2495 | 533 | 9.596 7544 | 616   | 0.403 2456 | 9.968 4952 | 84 | 20 |    |
|    | 50 | 9.565 3028 | 533 | 9.596 8160 | 616   | 0.403 1840 | 9.968 4868 | 83 | 10 |    |
| 34 | 0  | 9.565 3561 | 533 | 9.596 8776 | 616   | 0.403 1224 | 9.968 4785 | 83 | 0  | 26 |
|    | 10 | 9.565 4094 | 532 | 9.596 9392 | 616   | 0.403 0608 | 9.968 4702 | 83 | 50 |    |
|    | 20 | 9.565 4626 | 533 | 9.597 0008 | 615   | 0.402 9992 | 9.968 4619 | 84 | 40 |    |
|    | 30 | 9.565 5159 | 532 | 9.597 0623 | 616   | 0.402 9377 | 9.968 4535 | 83 | 30 |    |
|    | 40 | 9.565 5691 | 532 | 9.597 1239 | 616   | 0.402 8761 | 9.968 4452 | 83 | 20 |    |
|    | 50 | 9.565 6223 | 533 | 9.597 1855 | 615   | 0.402 8145 | 9.968 4369 | 83 | 10 |    |
| 35 | 0  | 9.565 6756 | 532 | 9.597 2470 | 616   | 0.402 7530 | 9.968 4286 | 84 | 0  | 25 |
|    | 10 | 9.565 7288 | 532 | 9.597 3086 | 615   | 0.402 6914 | 9.968 4202 | 83 | 50 |    |
|    | 20 | 9.565 7820 | 532 | 9.597 3701 | 616   | 0.402 6299 | 9.968 4119 | 83 | 40 |    |
|    | 30 | 9.565 8352 | 532 | 9.597 4317 | 615   | 0.402 5683 | 9.968 4036 | 84 | 30 |    |
|    | 40 | 9.565 8884 | 532 | 9.597 4932 | 615   | 0.402 5068 | 9.968 3952 | 83 | 20 |    |
|    | 50 | 9.565 9416 | 532 | 9.597 5547 | 615   | 0.402 4453 | 9.968 3869 | 83 | 10 |    |
| 36 | 0  | 9.565 9948 | 532 | 9.597 6162 | 615   | 0.402 3838 | 9.968 3786 | 84 | 0  | 24 |
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|    | 40 | 9.566 2074 | 532 | 9.597 8622 | 615   | 0.402 1378 | 9.968 3452 | 83 | 20 |    |
|    | 50 | 9.566 2606 | 531 | 9.597 9237 | 615   | 0.402 0763 | 9.968 3369 | 84 | 10 |    |
| 37 | 0  | 9.566 3137 | 532 | 9.597 9852 | 615   | 0.402 0148 | 9.968 3285 | 83 | 0  | 23 |
|    | 10 | 9.566 3669 | 531 | 9.598 0467 | 614   | 0.401 9533 | 9.968 3202 | 84 | 50 |    |
|    | 20 | 9.566 4200 | 531 | 9.598 1081 | 615   | 0.401 8919 | 9.968 3118 | 83 | 40 |    |
|    | 30 | 9.566 4731 | 531 | 9.598 1696 | 615   | 0.401 8304 | 9.968 3035 | 84 | 30 |    |
|    | 40 | 9.566 5262 | 531 | 9.598 2311 | 614   | 0.401 7689 | 9.968 2951 | 83 | 20 |    |
|    | 50 | 9.566 5793 | 531 | 9.598 2925 | 615   | 0.401 7075 | 9.968 2868 | 84 | 10 |    |
| 38 | 0  | 9.566 6324 | 531 | 9.598 3540 | 614   | 0.401 6460 | 9.968 2784 | 83 | 0  | 22 |
|    | 10 | 9.566 6855 | 531 | 9.598 4154 | 614   | 0.401 5846 | 9.968 2701 | 84 | 50 |    |
|    | 20 | 9.566 7386 | 530 | 9.598 4768 | 614   | 0.401 5232 | 9.968 2617 | 83 | 40 |    |
|    | 30 | 9.566 7916 | 531 | 9.598 5382 | 615   | 0.401 4618 | 9.968 2534 | 84 | 30 |    |
|    | 40 | 9.566 8447 | 530 | 9.598 5997 | 614   | 0.401 4003 | 9.968 2450 | 83 | 20 |    |
|    | 50 | 9.566 8977 | 531 | 9.598 6611 | 614   | 0.401 3389 | 9.968 2367 | 84 | 10 |    |
| 39 | 0  | 9.566 9508 | 530 | 9.598 7225 | 614   | 0.401 2775 | 9.968 2283 | 83 | 0  | 21 |
|    | 10 | 9.567 0038 | 531 | 9.598 7839 | 614   | 0.401 2161 | 9.968 2200 | 84 | 50 |    |
|    | 20 | 9.567 0569 | 530 | 9.598 8453 | 614   | 0.401 1547 | 9.968 2116 | 84 | 40 |    |
|    | 30 | 9.567 1099 | 530 | 9.598 9067 | 613   | 0.401 0933 | 9.968 2032 | 83 | 30 |    |
|    | 40 | 9.567 1629 | 530 | 9.598 9680 | 614   | 0.401 0320 | 9.968 1949 | 84 | 20 |    |
|    | 50 | 9.567 2159 | 530 | 9.599 0294 | 614   | 0.400 9706 | 9.968 1865 | 84 | 10 |    |
| 40 | 0  | 9.567 2689 | 530 | 9.599 0908 | 614   | 0.400 9092 | 9.968 1781 | 84 | 0  | 20 |
|    |    |            |     |            |       |            |            |    |    |    |
|    | "  | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d. | "  |    |

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| i  | n  | Sin        | d.  | Tang       | d. c. | Coſg       | Con        | d. | n  | i  |
|----|----|------------|-----|------------|-------|------------|------------|----|----|----|
| 40 | 0  | 9.569 2689 | 530 | 9.599 9788 | 613   | 0.400 0000 | 9.968 1781 | 83 | 0  | 20 |
|    | 10 | 9.569 3219 | 530 | 9.599 1541 | 614   | 0.400 0000 | 9.968 1698 | 84 | 50 |    |
|    | 20 | 9.569 3749 | 530 | 9.599 3135 | 615   | 0.400 0000 | 9.968 1614 | 84 | 40 |    |
|    | 30 | 9.569 4279 | 530 | 9.599 4728 | 616   | 0.400 0000 | 9.968 1530 | 84 | 30 |    |
|    | 40 | 9.569 4809 | 530 | 9.599 6321 | 617   | 0.400 0000 | 9.968 1447 | 84 | 20 |    |
|    | 50 | 9.569 5338 | 530 | 9.599 7915 | 618   | 0.400 0000 | 9.968 1364 | 84 | 10 |    |
| 41 | 0  | 9.569 5868 | 530 | 9.599 9508 | 619   | 0.400 0000 | 9.968 1279 | 83 | 0  | 19 |
|    | 10 | 9.569 6397 | 530 | 9.599 5208 | 613   | 0.400 0000 | 9.968 1196 | 84 | 50 |    |
|    | 20 | 9.569 6927 | 530 | 9.599 5815 | 614   | 0.400 0000 | 9.968 1113 | 84 | 40 |    |
|    | 30 | 9.569 7456 | 530 | 9.599 6428 | 615   | 0.400 0000 | 9.968 1028 | 84 | 30 |    |
|    | 40 | 9.569 7985 | 530 | 9.599 7041 | 616   | 0.400 0000 | 9.968 0944 | 84 | 20 |    |
|    | 50 | 9.569 8515 | 530 | 9.599 7654 | 617   | 0.400 0000 | 9.968 0861 | 84 | 10 |    |
| 42 | 0  | 9.569 9044 | 530 | 9.599 8267 | 618   | 0.400 0000 | 9.968 0777 | 84 | 0  | 18 |
|    | 10 | 9.569 9574 | 530 | 9.599 8880 | 619   | 0.400 0000 | 9.968 0693 | 84 | 50 |    |
|    | 20 | 9.569 0103 | 530 | 9.599 9493 | 613   | 0.400 0000 | 9.968 0609 | 84 | 40 |    |
|    | 30 | 9.569 0633 | 530 | 9.600 0106 | 614   | 0.400 0000 | 9.968 0525 | 84 | 30 |    |
|    | 40 | 9.569 1163 | 530 | 9.600 0719 | 615   | 0.400 0000 | 9.968 0442 | 84 | 20 |    |
|    | 50 | 9.569 1693 | 530 | 9.600 1332 | 616   | 0.400 0000 | 9.968 0358 | 84 | 10 |    |
| 43 | 0  | 9.569 2222 | 530 | 9.600 1945 | 617   | 0.400 0000 | 9.968 0274 | 84 | 0  | 17 |
|    | 10 | 9.569 2752 | 530 | 9.600 2558 | 618   | 0.400 0000 | 9.968 0190 | 84 | 50 |    |
|    | 20 | 9.569 3281 | 530 | 9.600 3171 | 619   | 0.400 0000 | 9.968 0106 | 84 | 40 |    |
|    | 30 | 9.569 3811 | 530 | 9.600 3784 | 613   | 0.400 0000 | 9.968 0022 | 84 | 30 |    |
|    | 40 | 9.569 4341 | 530 | 9.600 4397 | 614   | 0.400 0000 | 9.967 9938 | 84 | 20 |    |
|    | 50 | 9.569 4871 | 530 | 9.600 5010 | 615   | 0.400 0000 | 9.967 9854 | 84 | 10 |    |
| 44 | 0  | 9.569 5401 | 530 | 9.600 5623 | 616   | 0.400 0000 | 9.967 9770 | 84 | 0  | 16 |
|    | 10 | 9.569 5931 | 530 | 9.600 6236 | 617   | 0.400 0000 | 9.967 9686 | 84 | 50 |    |
|    | 20 | 9.569 6461 | 530 | 9.600 6849 | 618   | 0.400 0000 | 9.967 9602 | 84 | 40 |    |
|    | 30 | 9.569 6991 | 530 | 9.600 7462 | 619   | 0.400 0000 | 9.967 9518 | 84 | 30 |    |
|    | 40 | 9.569 7521 | 530 | 9.600 8075 | 613   | 0.400 0000 | 9.967 9434 | 84 | 20 |    |
|    | 50 | 9.569 8051 | 530 | 9.600 8688 | 614   | 0.400 0000 | 9.967 9350 | 84 | 10 |    |
| 45 | 0  | 9.569 8581 | 530 | 9.600 9301 | 615   | 0.400 0000 | 9.967 9266 | 84 | 0  | 15 |
|    | 10 | 9.569 9111 | 530 | 9.600 9914 | 616   | 0.400 0000 | 9.967 9182 | 84 | 50 |    |
|    | 20 | 9.569 9641 | 530 | 9.601 0527 | 617   | 0.400 0000 | 9.967 9098 | 84 | 40 |    |
|    | 30 | 9.569 0171 | 530 | 9.601 1140 | 618   | 0.400 0000 | 9.967 9014 | 84 | 30 |    |
|    | 40 | 9.569 0701 | 530 | 9.601 1753 | 619   | 0.400 0000 | 9.967 8930 | 84 | 20 |    |
|    | 50 | 9.569 1231 | 530 | 9.601 2366 | 613   | 0.400 0000 | 9.967 8846 | 84 | 10 |    |
| 46 | 0  | 9.569 1761 | 530 | 9.601 2979 | 614   | 0.400 0000 | 9.967 8762 | 84 | 0  | 14 |
|    | 10 | 9.569 2291 | 530 | 9.601 3592 | 615   | 0.400 0000 | 9.967 8678 | 84 | 50 |    |
|    | 20 | 9.569 2821 | 530 | 9.601 4205 | 616   | 0.400 0000 | 9.967 8594 | 84 | 40 |    |
|    | 30 | 9.569 3351 | 530 | 9.601 4818 | 617   | 0.400 0000 | 9.967 8510 | 84 | 30 |    |
|    | 40 | 9.569 3881 | 530 | 9.601 5431 | 618   | 0.400 0000 | 9.967 8426 | 84 | 20 |    |
|    | 50 | 9.569 4411 | 530 | 9.601 6044 | 619   | 0.400 0000 | 9.967 8342 | 84 | 10 |    |
| 47 | 0  | 9.569 4941 | 530 | 9.601 6657 | 613   | 0.400 0000 | 9.967 8258 | 84 | 0  | 13 |
|    | 10 | 9.569 5471 | 530 | 9.601 7270 | 614   | 0.400 0000 | 9.967 8174 | 84 | 50 |    |
|    | 20 | 9.569 5999 | 530 | 9.601 7883 | 615   | 0.400 0000 | 9.967 8090 | 84 | 40 |    |
|    | 30 | 9.569 6529 | 530 | 9.601 8496 | 616   | 0.400 0000 | 9.967 8006 | 84 | 30 |    |
|    | 40 | 9.569 7059 | 530 | 9.601 9109 | 617   | 0.400 0000 | 9.967 7922 | 84 | 20 |    |
|    | 50 | 9.569 7589 | 530 | 9.601 9722 | 618   | 0.400 0000 | 9.967 7838 | 84 | 10 |    |
| 48 | 0  | 9.569 8119 | 530 | 9.602 0335 | 619   | 0.400 0000 | 9.967 7754 | 84 | 0  | 12 |
|    | 10 | 9.569 8649 | 530 | 9.602 0948 | 613   | 0.400 0000 | 9.967 7670 | 84 | 50 |    |
|    | 20 | 9.569 9179 | 530 | 9.602 1561 | 614   | 0.400 0000 | 9.967 7586 | 84 | 40 |    |
|    | 30 | 9.569 9709 | 530 | 9.602 2174 | 615   | 0.400 0000 | 9.967 7502 | 84 | 30 |    |
|    | 40 | 9.570 0239 | 530 | 9.602 2787 | 616   | 0.400 0000 | 9.967 7418 | 84 | 20 |    |
|    | 50 | 9.570 0769 | 530 | 9.602 3400 | 617   | 0.400 0000 | 9.967 7334 | 84 | 10 |    |
| 49 | 0  | 9.570 1299 | 530 | 9.602 4013 | 618   | 0.400 0000 | 9.967 7250 | 84 | 0  | 11 |
|    | 10 | 9.570 1829 | 530 | 9.602 4626 | 619   | 0.400 0000 | 9.967 7166 | 84 | 50 |    |
|    | 20 | 9.570 2359 | 530 | 9.602 5239 | 613   | 0.400 0000 | 9.967 7082 | 84 | 40 |    |
|    | 30 | 9.570 2778 | 530 | 9.602 5852 | 614   | 0.400 0000 | 9.967 6998 | 84 | 30 |    |
|    | 40 | 9.570 3193 | 530 | 9.602 6465 | 615   | 0.400 0000 | 9.967 6914 | 84 | 20 |    |
|    | 50 | 9.570 3829 | 530 | 9.602 7078 | 616   | 0.400 0000 | 9.967 6830 | 84 | 10 |    |
| 50 | 0  | 9.570 4355 | 530 | 9.602 7691 | 617   | 0.400 0000 | 9.967 6746 | 84 | 0  | 10 |



|    | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d. | "  |    |
|----|----|------------|-----|------------|-------|------------|------------|----|----|----|
| 50 | 0  | 9.570 4355 | 525 | 9.602 7613 | 610   | 0.397 2387 | 9.967 6741 | 84 | 0  | 10 |
|    | 10 | 9.570 4880 | 525 | 9.602 8223 | 610   | 0.397 1777 | 9.967 6657 | 84 | 50 |    |
|    | 20 | 9.570 5405 | 526 | 9.602 8833 | 610   | 0.397 1167 | 9.967 6573 | 85 | 40 |    |
|    | 30 | 9.570 5931 | 525 | 9.602 9443 | 609   | 0.397 0557 | 9.967 6488 | 84 | 30 |    |
|    | 40 | 9.570 6456 | 525 | 9.603 0052 | 610   | 0.396 9948 | 9.967 6404 | 85 | 20 |    |
|    | 50 | 9.570 6981 | 525 | 9.603 0662 | 609   | 0.396 9338 | 9.967 6319 | 84 | 10 |    |
| 51 | 0  | 9.570 7506 | 525 | 9.603 1271 | 610   | 0.396 8729 | 9.967 6235 | 84 | 0  | 9  |
|    | 10 | 9.570 8031 | 525 | 9.603 1881 | 609   | 0.396 8119 | 9.967 6151 | 85 | 50 |    |
|    | 20 | 9.570 8556 | 525 | 9.603 2490 | 610   | 0.396 7510 | 9.967 6066 | 84 | 40 |    |
|    | 30 | 9.570 9081 | 525 | 9.603 3100 | 609   | 0.396 6900 | 9.967 5982 | 85 | 30 |    |
|    | 40 | 9.570 9606 | 525 | 9.603 3709 | 609   | 0.396 6291 | 9.967 5897 | 84 | 20 |    |
|    | 50 | 9.571 0131 | 525 | 9.603 4318 | 609   | 0.396 5682 | 9.967 5813 | 85 | 10 |    |
| 52 | 0  | 9.571 0656 | 524 | 9.603 4927 | 609   | 0.396 5073 | 9.967 5728 | 84 | 0  | 8  |
|    | 10 | 9.571 1180 | 525 | 9.603 5536 | 610   | 0.396 4464 | 9.967 5644 | 85 | 50 |    |
|    | 20 | 9.571 1705 | 524 | 9.603 6146 | 609   | 0.396 3854 | 9.967 5559 | 84 | 40 |    |
|    | 30 | 9.571 2229 | 525 | 9.603 6755 | 608   | 0.396 3245 | 9.967 5475 | 85 | 30 |    |
|    | 40 | 9.571 2754 | 524 | 9.603 7363 | 609   | 0.396 2637 | 9.967 5390 | 84 | 20 |    |
|    | 50 | 9.571 3278 | 524 | 9.603 7972 | 609   | 0.396 2028 | 9.967 5306 | 85 | 10 |    |
| 53 | 0  | 9.571 3802 | 524 | 9.603 8581 | 609   | 0.396 1419 | 9.967 5221 | 85 | 0  | 7  |
|    | 10 | 9.571 4326 | 524 | 9.603 9190 | 609   | 0.396 0810 | 9.967 5136 | 84 | 50 |    |
|    | 20 | 9.571 4850 | 524 | 9.603 9799 | 608   | 0.396 0201 | 9.967 5052 | 85 | 40 |    |
|    | 30 | 9.571 5374 | 524 | 9.604 0407 | 609   | 0.395 9593 | 9.967 4967 | 84 | 30 |    |
|    | 40 | 9.571 5898 | 524 | 9.604 1016 | 608   | 0.395 8984 | 9.967 4883 | 85 | 20 |    |
|    | 50 | 9.571 6422 | 524 | 9.604 1624 | 609   | 0.395 8376 | 9.967 4798 | 85 | 10 |    |
| 54 | 0  | 9.571 6946 | 524 | 9.604 2233 | 608   | 0.395 7767 | 9.967 4713 | 84 | 0  | 6  |
|    | 10 | 9.571 7470 | 523 | 9.604 2841 | 608   | 0.395 7159 | 9.967 4629 | 85 | 50 |    |
|    | 20 | 9.571 7993 | 524 | 9.604 3449 | 609   | 0.395 6551 | 9.967 4544 | 85 | 40 |    |
|    | 30 | 9.571 8517 | 524 | 9.604 4058 | 608   | 0.395 5942 | 9.967 4459 | 84 | 30 |    |
|    | 40 | 9.571 9041 | 523 | 9.604 4666 | 608   | 0.395 5334 | 9.967 4375 | 85 | 20 |    |
|    | 50 | 9.571 9564 | 523 | 9.604 5274 | 608   | 0.395 4726 | 9.967 4290 | 85 | 10 |    |
| 55 | 0  | 9.572 0087 | 524 | 9.604 5882 | 608   | 0.395 4118 | 9.967 4205 | 84 | 0  | 5  |
|    | 10 | 9.572 0611 | 523 | 9.604 6490 | 608   | 0.395 3510 | 9.967 4121 | 85 | 50 |    |
|    | 20 | 9.572 1134 | 523 | 9.604 7098 | 608   | 0.395 2902 | 9.967 4036 | 85 | 40 |    |
|    | 30 | 9.572 1657 | 523 | 9.604 7706 | 608   | 0.395 2294 | 9.967 3951 | 85 | 30 |    |
|    | 40 | 9.572 2180 | 523 | 9.604 8314 | 607   | 0.395 1686 | 9.967 3866 | 85 | 20 |    |
|    | 50 | 9.572 2703 | 523 | 9.604 8921 | 608   | 0.395 1079 | 9.967 3782 | 84 | 10 |    |
| 56 | 0  | 9.572 3226 | 523 | 9.604 9529 | 608   | 0.395 0471 | 9.967 3697 | 85 | 0  | 4  |
|    | 10 | 9.572 3749 | 523 | 9.605 0137 | 607   | 0.394 9863 | 9.967 3612 | 85 | 50 |    |
|    | 20 | 9.572 4272 | 522 | 9.605 0744 | 608   | 0.394 9256 | 9.967 3527 | 85 | 40 |    |
|    | 30 | 9.572 4794 | 523 | 9.605 1352 | 607   | 0.394 8648 | 9.967 3442 | 84 | 30 |    |
|    | 40 | 9.572 5317 | 522 | 9.605 1959 | 608   | 0.394 8041 | 9.967 3358 | 85 | 20 |    |
|    | 50 | 9.572 5839 | 523 | 9.605 2567 | 607   | 0.394 7433 | 9.967 3273 | 85 | 10 |    |
| 57 | 0  | 9.572 6362 | 522 | 9.605 3174 | 607   | 0.394 6826 | 9.967 3188 | 85 | 0  | 3  |
|    | 10 | 9.572 6884 | 523 | 9.605 3781 | 608   | 0.394 6219 | 9.967 3103 | 85 | 50 |    |
|    | 20 | 9.572 7407 | 522 | 9.605 4389 | 607   | 0.394 5611 | 9.967 3018 | 85 | 40 |    |
|    | 30 | 9.572 7929 | 522 | 9.605 4996 | 607   | 0.394 5004 | 9.967 2933 | 85 | 30 |    |
|    | 40 | 9.572 8451 | 522 | 9.605 5603 | 607   | 0.394 4397 | 9.967 2848 | 85 | 20 |    |
|    | 50 | 9.572 8973 | 522 | 9.605 6210 | 607   | 0.394 3790 | 9.967 2763 | 84 | 10 |    |
| 58 | 0  | 9.572 9495 | 522 | 9.605 6817 | 607   | 0.394 3183 | 9.967 2679 | 85 | 0  | 2  |
|    | 10 | 9.573 0017 | 522 | 9.605 7424 | 606   | 0.394 2576 | 9.967 2594 | 85 | 50 |    |
|    | 20 | 9.573 0539 | 522 | 9.605 8030 | 607   | 0.394 1970 | 9.967 2509 | 85 | 40 |    |
|    | 30 | 9.573 1061 | 522 | 9.605 8637 | 607   | 0.394 1363 | 9.967 2424 | 85 | 30 |    |
|    | 40 | 9.573 1583 | 521 | 9.605 9244 | 607   | 0.394 0756 | 9.967 2339 | 85 | 20 |    |
|    | 50 | 9.573 2104 | 522 | 9.605 9851 | 606   | 0.394 0149 | 9.967 2254 | 85 | 10 |    |
| 59 | 0  | 9.573 2626 | 522 | 9.606 0457 | 607   | 0.393 9543 | 9.967 2169 | 85 | 0  | 1  |
|    | 10 | 9.573 3148 | 521 | 9.606 1064 | 606   | 0.393 8936 | 9.967 2084 | 85 | 50 |    |
|    | 20 | 9.573 3669 | 521 | 9.606 1670 | 607   | 0.393 8330 | 9.967 1999 | 85 | 40 |    |
|    | 30 | 9.573 4190 | 522 | 9.606 2277 | 606   | 0.393 7723 | 9.967 1914 | 85 | 30 |    |
|    | 40 | 9.573 4712 | 521 | 9.606 2883 | 606   | 0.393 7117 | 9.967 1829 | 85 | 20 |    |
|    | 50 | 9.573 5233 | 521 | 9.606 3489 | 607   | 0.393 6511 | 9.967 1744 | 85 | 10 |    |
| 60 | 0  | 9.573 5754 |     | 9.606 4096 |       | 0.393 5904 | 9.967 1659 |    | 0  | 0  |
|    |    | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d. | "  |    |

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6 51.0  
7 59.5  
8 68.0  
9 76.5



|         |    | Sim        | d.  | Tang       | d. c. | Colg       | Con        | d. |    |    |
|---------|----|------------|-----|------------|-------|------------|------------|----|----|----|
|         | 0  | 9.573 5754 | 521 | 9.606 4096 | 6.6   | 0.191 5914 | 9.967 1659 | 85 | 0  | 60 |
| 005     | 10 | 9.573 6275 | 521 | 9.606 4702 | 6.6   | 0.191 5998 | 9.967 1574 | 86 | 50 |    |
| 1 60.5  | 20 | 9.573 6796 | 521 | 9.606 5308 | 6.6   | 0.191 6082 | 9.967 1488 | 86 | 40 |    |
| 2 120.5 | 30 | 9.573 7317 | 521 | 9.606 5914 | 6.6   | 0.191 6166 | 9.967 1403 | 85 | 30 |    |
| 3 180.5 | 40 | 9.573 7838 | 521 | 9.606 6520 | 6.6   | 0.191 6250 | 9.967 1318 | 85 | 20 |    |
| 4 240.5 | 50 | 9.573 8359 | 521 | 9.606 7126 | 6.6   | 0.191 6334 | 9.967 1233 | 85 | 10 |    |
| 5 300.5 |    |            |     |            |       |            |            |    |    |    |
| 6 360.5 | 1  | 9.573 8880 | 520 | 9.606 7732 | 6.6   | 0.191 6418 | 9.967 1148 | 85 | 0  | 59 |
| 7 420.5 | 10 | 9.573 9400 | 520 | 9.606 8337 | 6.6   | 0.191 6502 | 9.967 1063 | 85 | 50 |    |
| 8 480.5 | 20 | 9.573 9921 | 520 | 9.606 8943 | 6.6   | 0.191 6587 | 9.967 0978 | 85 | 40 |    |
| 9 540.5 | 30 | 9.574 0441 | 520 | 9.606 9549 | 6.6   | 0.191 6671 | 9.967 0893 | 86 | 30 |    |
|         | 40 | 9.574 0962 | 521 | 9.607 0155 | 6.6   | 0.191 6755 | 9.967 0807 | 85 | 20 |    |
|         | 50 | 9.574 1482 | 520 | 9.607 0760 | 6.6   | 0.191 6839 | 9.967 0722 | 85 | 10 |    |
| 604     |    |            |     |            |       |            |            |    |    |    |
| 1 60.4  | 0  | 9.574 2003 | 520 | 9.607 1366 | 6.6   | 0.191 6923 | 9.967 0637 | 85 | 0  | 58 |
| 2 120.4 | 10 | 9.574 2523 | 520 | 9.607 1971 | 6.6   | 0.191 7007 | 9.967 0552 | 86 | 50 |    |
| 3 180.4 | 20 | 9.574 3043 | 520 | 9.607 2576 | 6.6   | 0.191 7091 | 9.967 0467 | 85 | 40 |    |
| 4 240.4 | 30 | 9.574 3563 | 520 | 9.607 3182 | 6.6   | 0.191 7175 | 9.967 0381 | 85 | 30 |    |
| 5 300.4 | 40 | 9.574 4083 | 520 | 9.607 3787 | 6.6   | 0.191 7259 | 9.967 0296 | 85 | 20 |    |
| 6 360.4 | 50 | 9.574 4603 | 520 | 9.607 4393 | 6.6   | 0.191 7343 | 9.967 0211 | 86 | 10 |    |
| 7 420.4 |    |            |     |            |       |            |            |    |    |    |
| 8 480.4 | 3  | 9.574 5123 | 520 | 9.607 4997 | 6.6   | 0.191 7427 | 9.967 0125 | 85 | 0  | 57 |
| 9 540.4 | 10 | 9.574 5643 | 520 | 9.607 5603 | 6.6   | 0.191 7511 | 9.967 0040 | 85 | 50 |    |
|         | 20 | 9.574 6163 | 520 | 9.607 6207 | 6.6   | 0.191 7595 | 9.966 9955 | 85 | 40 |    |
|         | 30 | 9.574 6683 | 520 | 9.607 6812 | 6.6   | 0.191 7679 | 9.966 9870 | 86 | 30 |    |
|         | 40 | 9.574 7203 | 520 | 9.607 7417 | 6.6   | 0.191 7763 | 9.966 9784 | 85 | 20 |    |
|         | 50 | 9.574 7723 | 520 | 9.607 8022 | 6.6   | 0.191 7847 | 9.966 9699 | 85 | 10 |    |
| 604     |    |            |     |            |       |            |            |    |    |    |
| 1 60.3  | 0  | 9.574 8243 | 520 | 9.607 8627 | 6.6   | 0.191 7931 | 9.966 9614 | 86 | 0  | 56 |
| 2 120.3 | 10 | 9.574 8763 | 520 | 9.607 9232 | 6.6   | 0.191 8015 | 9.966 9528 | 85 | 50 |    |
| 3 180.3 | 20 | 9.574 9283 | 520 | 9.607 9837 | 6.6   | 0.191 8099 | 9.966 9443 | 85 | 40 |    |
| 4 240.3 | 30 | 9.574 9803 | 520 | 9.608 0441 | 6.6   | 0.191 8183 | 9.966 9357 | 85 | 30 |    |
| 5 300.3 | 40 | 9.575 0323 | 520 | 9.608 1045 | 6.6   | 0.191 8267 | 9.966 9272 | 85 | 20 |    |
| 6 360.3 | 50 | 9.575 0843 | 520 | 9.608 1650 | 6.6   | 0.191 8351 | 9.966 9187 | 86 | 10 |    |
| 7 420.3 |    |            |     |            |       |            |            |    |    |    |
| 8 480.3 | 5  | 9.575 1363 | 520 | 9.608 2254 | 6.6   | 0.191 8435 | 9.966 9101 | 85 | 0  | 55 |
| 9 540.3 | 10 | 9.575 1883 | 520 | 9.608 2859 | 6.6   | 0.191 8519 | 9.966 9016 | 86 | 50 |    |
|         | 20 | 9.575 2403 | 520 | 9.608 3463 | 6.6   | 0.191 8603 | 9.966 8931 | 85 | 40 |    |
|         | 30 | 9.575 2923 | 520 | 9.608 4067 | 6.6   | 0.191 8687 | 9.966 8845 | 86 | 30 |    |
|         | 40 | 9.575 3443 | 520 | 9.608 4671 | 6.6   | 0.191 8771 | 9.966 8760 | 85 | 20 |    |
|         | 50 | 9.575 3963 | 520 | 9.608 5276 | 6.6   | 0.191 8855 | 9.966 8674 | 86 | 10 |    |
| 604     |    |            |     |            |       |            |            |    |    |    |
| 1 60.2  | 0  | 9.575 4483 | 520 | 9.608 5880 | 6.6   | 0.191 8939 | 9.966 8588 | 85 | 0  | 54 |
| 2 120.2 | 10 | 9.575 4983 | 520 | 9.608 6484 | 6.6   | 0.191 9023 | 9.966 8503 | 86 | 50 |    |
| 3 180.2 | 20 | 9.575 5483 | 520 | 9.608 7087 | 6.6   | 0.191 9107 | 9.966 8417 | 85 | 40 |    |
| 4 240.2 | 30 | 9.575 5983 | 520 | 9.608 7691 | 6.6   | 0.191 9191 | 9.966 8332 | 86 | 30 |    |
| 5 300.2 | 40 | 9.575 6483 | 520 | 9.608 8295 | 6.6   | 0.191 9275 | 9.966 8246 | 85 | 20 |    |
| 6 360.2 | 50 | 9.575 6983 | 520 | 9.608 8899 | 6.6   | 0.191 9359 | 9.966 8161 | 86 | 10 |    |
| 7 420.2 |    |            |     |            |       |            |            |    |    |    |
| 8 480.2 | 7  | 9.575 7503 | 520 | 9.608 9503 | 6.6   | 0.191 9443 | 9.966 8075 | 85 | 0  | 53 |
| 9 540.2 | 10 | 9.575 8003 | 520 | 9.609 0107 | 6.6   | 0.191 9527 | 9.966 7990 | 86 | 50 |    |
|         | 20 | 9.575 8503 | 520 | 9.609 0711 | 6.6   | 0.191 9611 | 9.966 7904 | 85 | 40 |    |
|         | 30 | 9.575 9003 | 520 | 9.609 1315 | 6.6   | 0.191 9695 | 9.966 7819 | 86 | 30 |    |
|         | 40 | 9.575 9503 | 520 | 9.609 1919 | 6.6   | 0.191 9779 | 9.966 7733 | 85 | 20 |    |
|         | 50 | 9.576 0003 | 520 | 9.609 2523 | 6.6   | 0.191 9863 | 9.966 7648 | 86 | 10 |    |
| 604     |    |            |     |            |       |            |            |    |    |    |
| 1 60.1  | 0  | 9.576 0603 | 520 | 9.609 3127 | 6.6   | 0.191 9947 | 9.966 7562 | 85 | 0  | 52 |
| 2 120.1 | 10 | 9.576 1203 | 520 | 9.609 3731 | 6.6   | 0.192 0031 | 9.966 7477 | 86 | 50 |    |
| 3 180.1 | 20 | 9.576 1723 | 520 | 9.609 4335 | 6.6   | 0.192 0115 | 9.966 7391 | 85 | 40 |    |
| 4 240.1 | 30 | 9.576 2243 | 520 | 9.609 4939 | 6.6   | 0.192 0199 | 9.966 7306 | 86 | 30 |    |
| 5 300.1 | 40 | 9.576 2763 | 520 | 9.609 5543 | 6.6   | 0.192 0283 | 9.966 7220 | 85 | 20 |    |
| 6 360.1 | 50 | 9.576 3283 | 520 | 9.609 6147 | 6.6   | 0.192 0367 | 9.966 7135 | 86 | 10 |    |
| 7 420.1 |    |            |     |            |       |            |            |    |    |    |
| 8 480.1 | 9  | 9.576 3793 | 520 | 9.609 6751 | 6.6   | 0.192 0451 | 9.966 7049 | 85 | 0  | 51 |
| 9 540.1 | 10 | 9.576 4303 | 520 | 9.609 7355 | 6.6   | 0.192 0535 | 9.966 6964 | 86 | 50 |    |
|         | 20 | 9.576 4803 | 520 | 9.609 7959 | 6.6   | 0.192 0619 | 9.966 6878 | 85 | 40 |    |
|         | 30 | 9.576 5303 | 520 | 9.609 8563 | 6.6   | 0.192 0703 | 9.966 6793 | 86 | 30 |    |
|         | 40 | 9.576 5803 | 520 | 9.609 9167 | 6.6   | 0.192 0787 | 9.966 6707 | 85 | 20 |    |
|         | 50 | 9.576 6303 | 520 | 9.609 9771 | 6.6   | 0.192 0871 | 9.966 6622 | 86 | 10 |    |
| 604     |    |            |     |            |       |            |            |    |    |    |
| 1 60.0  | 0  | 9.576 6803 | 520 | 9.610 0375 | 6.6   | 0.192 0955 | 9.966 6536 | 85 | 0  | 50 |



|    | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d  | "  |    |
|----|----|------------|-----|------------|-------|------------|------------|----|----|----|
| 10 | o  | 9.576 6892 | 517 | 9.610 0359 | 602   | 0.389 9641 | 9.966 6533 | 86 | o  | 50 |
| 10 | 10 | 9.576 7409 | 516 | 9.610 0961 | 603   | 0.389 9039 | 9.966 6447 | 85 | 50 |    |
| 20 | 20 | 9.576 7925 | 517 | 9.610 1564 | 602   | 0.389 8436 | 9.966 6362 | 86 | 40 |    |
| 30 | 30 | 9.576 8442 | 517 | 9.610 2166 | 603   | 0.389 7834 | 9.966 6276 | 86 | 30 |    |
| 40 | 40 | 9.576 8959 | 516 | 9.610 2769 | 602   | 0.389 7231 | 9.966 6190 | 86 | 20 |    |
| 50 | 50 | 9.576 9475 | 516 | 9.610 3371 | 602   | 0.389 6629 | 9.966 6104 | 86 | 10 |    |
| 11 | o  | 9.576 9991 | 517 | 9.610 3973 | 602   | 0.389 6027 | 9.966 6018 | 86 | o  | 49 |
| 10 | 10 | 9.577 0508 | 516 | 9.610 4575 | 603   | 0.389 5425 | 9.966 5932 | 86 | 50 |    |
| 20 | 20 | 9.577 1024 | 516 | 9.610 5178 | 602   | 0.389 4822 | 9.966 5846 | 85 | 40 |    |
| 30 | 30 | 9.577 1540 | 516 | 9.610 5780 | 602   | 0.389 4220 | 9.966 5761 | 86 | 30 |    |
| 40 | 40 | 9.577 2056 | 516 | 9.610 6382 | 602   | 0.389 3618 | 9.966 5675 | 86 | 20 |    |
| 50 | 50 | 9.577 2572 | 516 | 9.610 6984 | 602   | 0.389 3016 | 9.966 5589 | 86 | 10 |    |
| 12 | o  | 9.577 3088 | 516 | 9.610 7586 | 601   | 0.389 2414 | 9.966 5503 | 86 | o  | 48 |
| 10 | 10 | 9.577 3604 | 516 | 9.610 8187 | 602   | 0.389 1813 | 9.966 5417 | 86 | 50 |    |
| 20 | 20 | 9.577 4120 | 516 | 9.610 8789 | 602   | 0.389 1211 | 9.966 5331 | 86 | 40 |    |
| 30 | 30 | 9.577 4636 | 516 | 9.610 9391 | 601   | 0.389 0609 | 9.966 5245 | 86 | 30 |    |
| 40 | 40 | 9.577 5152 | 515 | 9.610 9992 | 602   | 0.389 0008 | 9.966 5159 | 86 | 20 |    |
| 50 | 50 | 9.577 5667 | 516 | 9.611 0594 | 602   | 0.388 9406 | 9.966 5073 | 86 | 10 |    |
| 13 | o  | 9.577 6183 | 515 | 9.611 1196 | 601   | 0.388 8804 | 9.966 4987 | 86 | o  | 47 |
| 10 | 10 | 9.577 6698 | 516 | 9.611 1797 | 602   | 0.388 8203 | 9.966 4901 | 86 | 50 |    |
| 20 | 20 | 9.577 7214 | 515 | 9.611 2399 | 601   | 0.388 7601 | 9.966 4815 | 86 | 40 |    |
| 30 | 30 | 9.577 7729 | 515 | 9.611 3000 | 601   | 0.388 7000 | 9.966 4729 | 86 | 30 |    |
| 40 | 40 | 9.577 8244 | 515 | 9.611 3601 | 601   | 0.388 6399 | 9.966 4643 | 86 | 20 |    |
| 50 | 50 | 9.577 8759 | 516 | 9.611 4202 | 602   | 0.388 5798 | 9.966 4557 | 86 | 10 |    |
| 14 | o  | 9.577 9275 | 515 | 9.611 4804 | 601   | 0.388 5196 | 9.966 4471 | 86 | o  | 46 |
| 10 | 10 | 9.577 9790 | 515 | 9.611 5405 | 601   | 0.388 4595 | 9.966 4385 | 86 | 50 |    |
| 20 | 20 | 9.578 0305 | 514 | 9.611 6006 | 601   | 0.388 3994 | 9.966 4299 | 86 | 40 |    |
| 30 | 30 | 9.578 0819 | 515 | 9.611 6607 | 601   | 0.388 3393 | 9.966 4213 | 86 | 30 |    |
| 40 | 40 | 9.578 1334 | 515 | 9.611 7208 | 601   | 0.388 2792 | 9.966 4127 | 87 | 20 |    |
| 50 | 50 | 9.578 1849 | 515 | 9.611 7809 | 600   | 0.388 2191 | 9.966 4040 | 86 | 10 |    |
| 15 | o  | 9.578 2364 | 514 | 9.611 8409 | 601   | 0.388 1591 | 9.966 3954 | 86 | o  | 45 |
| 10 | 10 | 9.578 2878 | 515 | 9.611 9010 | 601   | 0.388 0990 | 9.966 3868 | 86 | 50 |    |
| 20 | 20 | 9.578 3393 | 514 | 9.611 9611 | 601   | 0.388 0389 | 9.966 3782 | 86 | 40 |    |
| 30 | 30 | 9.578 3907 | 515 | 9.612 0212 | 600   | 0.387 9788 | 9.966 3696 | 86 | 30 |    |
| 40 | 40 | 9.578 4422 | 514 | 9.612 0812 | 601   | 0.387 9188 | 9.966 3610 | 87 | 20 |    |
| 50 | 50 | 9.578 4936 | 514 | 9.612 1413 | 600   | 0.387 8587 | 9.966 3523 | 86 | 10 |    |
| 16 | o  | 9.578 5450 | 515 | 9.612 2013 | 601   | 0.387 7987 | 9.966 3437 | 86 | o  | 44 |
| 10 | 10 | 9.578 5965 | 514 | 9.612 2614 | 600   | 0.387 7386 | 9.966 3351 | 86 | 50 |    |
| 20 | 20 | 9.578 6479 | 514 | 9.612 3214 | 600   | 0.387 6786 | 9.966 3265 | 86 | 40 |    |
| 30 | 30 | 9.578 6993 | 514 | 9.612 3814 | 600   | 0.387 6186 | 9.966 3179 | 87 | 30 |    |
| 40 | 40 | 9.578 7507 | 514 | 9.612 4414 | 601   | 0.387 5586 | 9.966 3092 | 86 | 20 |    |
| 50 | 50 | 9.578 8021 | 514 | 9.612 5015 | 600   | 0.387 4985 | 9.966 3006 | 86 | 10 |    |
| 17 | o  | 9.578 8535 | 513 | 9.612 5615 | 600   | 0.387 4385 | 9.966 2920 | 87 | o  | 43 |
| 10 | 10 | 9.578 9048 | 514 | 9.612 6215 | 600   | 0.387 3785 | 9.966 2833 | 86 | 50 |    |
| 20 | 20 | 9.578 9562 | 514 | 9.612 6815 | 600   | 0.387 3185 | 9.966 2747 | 86 | 40 |    |
| 30 | 30 | 9.579 0076 | 513 | 9.612 7415 | 600   | 0.387 2585 | 9.966 2661 | 86 | 30 |    |
| 40 | 40 | 9.579 0589 | 513 | 9.612 8015 | 599   | 0.387 1985 | 9.966 2575 | 87 | 20 |    |
| 50 | 50 | 9.579 1103 | 514 | 9.612 8614 | 600   | 0.387 1386 | 9.966 2488 | 86 | 10 |    |
| 18 | o  | 9.579 1616 | 513 | 9.612 9214 | 600   | 0.387 0786 | 9.966 2402 | 87 | o  | 42 |
| 10 | 10 | 9.579 2129 | 514 | 9.612 9814 | 600   | 0.387 0186 | 9.966 2315 | 86 | 50 |    |
| 20 | 20 | 9.579 2643 | 513 | 9.613 0414 | 599   | 0.386 9586 | 9.966 2229 | 86 | 40 |    |
| 30 | 30 | 9.579 3156 | 513 | 9.613 1013 | 600   | 0.386 8987 | 9.966 2143 | 87 | 30 |    |
| 40 | 40 | 9.579 3669 | 513 | 9.613 1613 | 599   | 0.386 8387 | 9.966 2056 | 86 | 20 |    |
| 50 | 50 | 9.579 4182 | 513 | 9.613 2212 | 600   | 0.386 7788 | 9.966 1970 | 86 | 10 |    |
| 19 | o  | 9.579 4695 | 513 | 9.613 2812 | 599   | 0.386 7188 | 9.966 1884 | 87 | o  | 41 |
| 10 | 10 | 9.579 5208 | 513 | 9.613 3411 | 599   | 0.386 6589 | 9.966 1797 | 86 | 50 |    |
| 20 | 20 | 9.579 5721 | 513 | 9.613 4010 | 599   | 0.386 5990 | 9.966 1711 | 87 | 40 |    |
| 30 | 30 | 9.579 6234 | 512 | 9.613 4609 | 599   | 0.386 5391 | 9.966 1624 | 86 | 30 |    |
| 40 | 40 | 9.579 6746 | 513 | 9.613 5209 | 599   | 0.386 4791 | 9.966 1538 | 87 | 20 |    |
| 50 | 50 | 9.579 7259 | 513 | 9.613 5808 | 599   | 0.386 4192 | 9.966 1451 | 86 | 10 |    |
| 20 | o  | 9.579 7772 | 513 | 9.613 6407 | 599   | 0.386 3593 | 9.966 1365 | 86 | o  | 40 |
|    | "  | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d. | "  |    |

601

1 60.1  
2 120.2  
3 180.3  
4 240.4  
5 300.5  
6 360.6  
7 420.7  
8 480.8  
9 540.9

599

1 59.9  
2 119.8  
3 179.7  
4 239.6  
5 299.5  
6 359.4  
7 419.3  
8 479.2  
9 539.1

517

1 51.7  
2 103.4  
3 155.1  
4 206.8  
5 258.5  
6 310.2  
7 361.9  
8 413.6  
9 465.3

515

1 51.5  
2 103.0  
3 154.5  
4 206.0  
5 257.5  
6 309.0  
7 360.5  
8 412.0  
9 463.5

513

1 51.3  
2 102.6  
3 153.9  
4 205.2  
5 256.5  
6 307.8  
7 359.1  
8 410.4  
9 461.7

86

1 8.6  
2 17.2  
3 25.8  
4 34.4  
5 43.0  
6 51.6  
7 60.2  
8 68.8  
9 77.4



500  
1 50.0  
2 119.8  
3 179.7  
4 239.6  
5 299.5  
6 359.4  
7 419.3  
8 479.2  
9 539.1

507  
1 50.7  
2 119.4  
3 178.8  
4 238.5  
5 298.3  
6 358.1  
7 417.9  
8 477.6  
9 537.3

513  
1 51.3  
2 121.6  
3 181.9  
4 242.2  
5 302.5  
6 362.8  
7 423.1  
8 483.4  
9 543.7

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1 51.1  
2 121.4  
3 181.7  
4 242.0  
5 302.3  
6 362.6  
7 422.9  
8 483.2  
9 543.5

509  
1 50.9  
2 120.8  
3 180.7  
4 240.6  
5 300.5  
6 360.4  
7 420.3  
8 480.2  
9 540.1

87  
1 8.7  
2 17.4  
3 26.1  
4 34.8  
5 43.5  
6 52.2  
7 60.9  
8 69.6  
9 78.3

| <i>r</i> | <i>n</i> | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d. | <i>n</i> | <i>r</i> |
|----------|----------|------------|-----|------------|-------|------------|------------|----|----------|----------|
| 20       | 0        | 9.579 7772 | 512 | 9.613 6107 | 599   | 0.386 3591 | 9.966 1365 | 87 | 0        | 40       |
|          | 10       | 9.579 8284 | 512 | 9.613 7006 | 599   | 0.386 3994 | 9.966 1278 | 86 | 50       |          |
|          | 20       | 9.579 8796 | 513 | 9.613 7605 | 599   | 0.386 2495 | 9.966 1192 | 87 | 40       |          |
|          | 30       | 9.579 9309 | 512 | 9.613 8204 | 598   | 0.386 1796 | 9.966 1105 | 86 | 30       |          |
|          | 40       | 9.579 9821 | 512 | 9.613 8802 | 598   | 0.386 1195 | 9.966 1019 | 87 | 20       |          |
| 21       | 50       | 9.580 0333 | 512 | 9.613 9401 | 599   | 0.386 0599 | 9.966 9312 | 86 | 10       | 39       |
|          | 0        | 9.580 0845 | 512 | 9.613 0000 | 598   | 0.386 0000 | 9.966 0846 | 87 | 0        |          |
|          | 10       | 9.580 1357 | 512 | 9.613 0598 | 599   | 0.385 9192 | 9.966 0759 | 87 | 50       |          |
|          | 20       | 9.580 1869 | 512 | 9.613 1197 | 599   | 0.385 8593 | 9.966 0672 | 86 | 40       |          |
|          | 30       | 9.580 2381 | 512 | 9.613 1796 | 599   | 0.385 8204 | 9.966 0586 | 87 | 30       |          |
| 22       | 40       | 9.580 2893 | 512 | 9.613 2394 | 598   | 0.385 7606 | 9.966 0499 | 86 | 20       | 38       |
|          | 50       | 9.580 3405 | 512 | 9.613 2992 | 599   | 0.385 7008 | 9.966 0412 | 87 | 10       |          |
|          | 0        | 9.580 3917 | 511 | 9.613 3591 | 598   | 0.385 6409 | 9.966 0326 | 87 | 0        |          |
|          | 10       | 9.580 4428 | 512 | 9.613 4189 | 598   | 0.385 5811 | 9.966 0239 | 86 | 50       |          |
|          | 20       | 9.580 4940 | 512 | 9.613 4787 | 599   | 0.385 5213 | 9.966 0152 | 87 | 40       |          |
| 23       | 30       | 9.580 5452 | 511 | 9.613 5386 | 598   | 0.385 4614 | 9.966 0066 | 87 | 30       | 37       |
|          | 40       | 9.580 5963 | 511 | 9.613 5984 | 598   | 0.385 4016 | 9.965 9979 | 86 | 20       |          |
|          | 50       | 9.580 6474 | 512 | 9.613 6582 | 598   | 0.385 3418 | 9.965 9891 | 87 | 10       |          |
|          | 0        | 9.580 6986 | 511 | 9.613 7180 | 598   | 0.385 2820 | 9.965 9804 | 87 | 0        |          |
|          | 10       | 9.580 7497 | 512 | 9.613 7778 | 598   | 0.385 2222 | 9.965 9717 | 87 | 50       |          |
| 24       | 20       | 9.580 8008 | 511 | 9.613 8376 | 597   | 0.385 1623 | 9.965 9630 | 86 | 40       | 36       |
|          | 30       | 9.580 8519 | 511 | 9.613 8974 | 598   | 0.385 1025 | 9.965 9543 | 87 | 30       |          |
|          | 40       | 9.580 9030 | 512 | 9.613 9571 | 598   | 0.385 0427 | 9.965 9456 | 87 | 20       |          |
|          | 50       | 9.580 9541 | 511 | 9.613 0169 | 597   | 0.384 9828 | 9.965 9369 | 87 | 10       |          |
|          | 0        | 9.581 0052 | 511 | 9.613 0766 | 598   | 0.384 9230 | 9.965 9282 | 86 | 0        |          |
| 25       | 10       | 9.581 0563 | 510 | 9.613 1364 | 598   | 0.384 8631 | 9.965 9195 | 87 | 50       | 35       |
|          | 20       | 9.581 1074 | 511 | 9.613 1961 | 597   | 0.384 8033 | 9.965 9108 | 87 | 40       |          |
|          | 30       | 9.581 1585 | 511 | 9.613 2559 | 597   | 0.384 7434 | 9.965 9021 | 87 | 30       |          |
|          | 40       | 9.581 2095 | 510 | 9.613 3157 | 597   | 0.384 6836 | 9.965 8934 | 87 | 20       |          |
|          | 50       | 9.581 2606 | 511 | 9.613 3754 | 597   | 0.384 6237 | 9.965 8847 | 87 | 10       |          |
| 26       | 0        | 9.581 3116 | 510 | 9.613 4351 | 597   | 0.384 5639 | 9.965 8761 | 86 | 0        | 34       |
|          | 10       | 9.581 3626 | 510 | 9.613 4948 | 598   | 0.384 5041 | 9.965 8674 | 87 | 50       |          |
|          | 20       | 9.581 4136 | 511 | 9.613 5546 | 597   | 0.384 4443 | 9.965 8587 | 87 | 40       |          |
|          | 30       | 9.581 4647 | 510 | 9.613 6143 | 597   | 0.384 3845 | 9.965 8500 | 87 | 30       |          |
|          | 40       | 9.581 5157 | 510 | 9.613 6741 | 597   | 0.384 3247 | 9.965 8413 | 87 | 20       |          |
| 27       | 50       | 9.581 5667 | 510 | 9.613 7337 | 597   | 0.384 2649 | 9.965 8326 | 87 | 10       | 33       |
|          | 0        | 9.581 6177 | 511 | 9.613 7934 | 597   | 0.384 2051 | 9.965 8239 | 87 | 0        |          |
|          | 10       | 9.581 6687 | 510 | 9.613 8531 | 596   | 0.384 1453 | 9.965 8152 | 87 | 50       |          |
|          | 20       | 9.581 7197 | 510 | 9.613 9127 | 597   | 0.384 0855 | 9.965 8065 | 87 | 40       |          |
|          | 30       | 9.581 7707 | 509 | 9.613 9724 | 597   | 0.384 0257 | 9.965 7978 | 87 | 30       |          |
| 28       | 40       | 9.581 8216 | 510 | 9.616 0321 | 597   | 0.383 9659 | 9.965 7891 | 87 | 20       | 32       |
|          | 50       | 9.581 8726 | 510 | 9.616 0918 | 596   | 0.383 9061 | 9.965 7804 | 87 | 10       |          |
|          | 0        | 9.581 9236 | 509 | 9.616 1514 | 597   | 0.383 8463 | 9.965 7717 | 87 | 0        |          |
|          | 10       | 9.581 9745 | 510 | 9.616 2111 | 596   | 0.383 7865 | 9.965 7630 | 87 | 50       |          |
|          | 20       | 9.582 0255 | 509 | 9.616 2707 | 597   | 0.383 7267 | 9.965 7543 | 87 | 40       |          |
| 29       | 30       | 9.582 0764 | 509 | 9.616 3304 | 596   | 0.383 6669 | 9.965 7456 | 87 | 30       | 31       |
|          | 40       | 9.582 1273 | 510 | 9.616 3901 | 596   | 0.383 6071 | 9.965 7369 | 87 | 20       |          |
|          | 50       | 9.582 1781 | 509 | 9.616 4496 | 597   | 0.383 5473 | 9.965 7282 | 87 | 10       |          |
|          | 0        | 9.582 2292 | 509 | 9.616 5093 | 596   | 0.383 4875 | 9.965 7195 | 87 | 0        |          |
|          | 10       | 9.582 2801 | 509 | 9.616 5689 | 596   | 0.383 4277 | 9.965 7108 | 87 | 50       |          |
| 30       | 20       | 9.582 3310 | 509 | 9.616 6285 | 596   | 0.383 3679 | 9.965 7021 | 87 | 40       | 30       |
|          | 30       | 9.582 3819 | 509 | 9.616 6881 | 596   | 0.383 3081 | 9.965 6934 | 87 | 30       |          |
|          | 40       | 9.582 4328 | 509 | 9.616 7477 | 596   | 0.383 2483 | 9.965 6847 | 87 | 20       |          |
|          | 50       | 9.582 4837 | 508 | 9.616 8073 | 596   | 0.383 1885 | 9.965 6760 | 87 | 10       |          |
|          | 0        | 9.582 5345 | 509 | 9.616 8669 | 596   | 0.383 1287 | 9.965 6673 | 87 | 0        |          |
| 31       | 10       | 9.582 5854 | 509 | 9.616 9265 | 596   | 0.383 0689 | 9.965 6586 | 87 | 50       | 30       |
|          | 20       | 9.582 6363 | 508 | 9.616 9861 | 595   | 0.383 0091 | 9.965 6499 | 87 | 40       |          |
|          | 30       | 9.582 6871 | 509 | 9.617 0456 | 595   | 0.382 9493 | 9.965 6412 | 87 | 30       |          |
|          | 40       | 9.582 7380 | 508 | 9.617 1052 | 595   | 0.382 8895 | 9.965 6325 | 87 | 20       |          |
|          | 50       | 9.582 7888 | 509 | 9.617 1648 | 595   | 0.382 8297 | 9.965 6238 | 87 | 10       |          |
| 32       | 0        | 9.582 8397 | 509 | 9.617 2243 | 595   | 0.382 7699 | 9.965 6151 | 87 | 0        | 30       |
|          | 10       | 9.582 8905 | 509 | 9.617 2839 | 595   | 0.382 7101 | 9.965 6064 | 87 | 50       |          |



|    | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d. | "  |    |
|----|----|------------|-----|------------|-------|------------|------------|----|----|----|
| 30 | 0  | 9.582 8397 | 508 | 9.617 2243 | 596   | 0.382 7757 | 9.965 6153 | 87 | 0  | 30 |
|    | 10 | 9.582 8905 | 508 | 9.617 2839 | 595   | 0.382 7161 | 9.965 6066 | 87 | 50 |    |
|    | 20 | 9.582 9413 | 508 | 9.617 3434 | 595   | 0.382 6566 | 9.965 5979 | 87 | 40 |    |
|    | 30 | 9.582 9921 | 508 | 9.617 4029 | 596   | 0.382 5971 | 9.965 5892 | 87 | 30 |    |
|    | 40 | 9.583 0429 | 508 | 9.617 4625 | 595   | 0.382 5375 | 9.965 5805 | 88 | 20 |    |
|    | 50 | 9.583 0937 | 508 | 9.617 5220 | 595   | 0.382 4780 | 9.965 5717 | 87 | 10 |    |
| 31 | 0  | 9.583 1445 | 508 | 9.617 5815 | 595   | 0.382 4185 | 9.965 5630 | 87 | 0  | 29 |
|    | 10 | 9.583 1953 | 508 | 9.617 6410 | 596   | 0.382 3590 | 9.965 5543 | 88 | 50 |    |
|    | 20 | 9.583 2461 | 508 | 9.617 7006 | 595   | 0.382 2994 | 9.965 5455 | 87 | 40 |    |
|    | 30 | 9.583 2969 | 507 | 9.617 7601 | 595   | 0.382 2399 | 9.965 5368 | 87 | 30 |    |
|    | 40 | 9.583 3476 | 508 | 9.617 8196 | 595   | 0.382 1804 | 9.965 5281 | 88 | 20 |    |
|    | 50 | 9.583 3984 | 507 | 9.617 8790 | 594   | 0.382 1210 | 9.965 5193 | 87 | 10 |    |
| 32 | 0  | 9.583 4491 | 508 | 9.617 9385 | 595   | 0.382 0615 | 9.965 5106 | 87 | 0  | 28 |
|    | 10 | 9.583 4999 | 507 | 9.617 9980 | 595   | 0.382 0020 | 9.965 5019 | 88 | 50 |    |
|    | 20 | 9.583 5506 | 508 | 9.618 0575 | 595   | 0.381 9425 | 9.965 4931 | 87 | 40 |    |
|    | 30 | 9.583 6014 | 507 | 9.618 1170 | 594   | 0.381 8830 | 9.965 4844 | 87 | 30 |    |
|    | 40 | 9.583 6521 | 507 | 9.618 1764 | 595   | 0.381 8236 | 9.965 4757 | 88 | 20 |    |
|    | 50 | 9.583 7028 | 507 | 9.618 2359 | 594   | 0.381 7641 | 9.965 4669 | 87 | 10 |    |
| 33 | 0  | 9.583 7535 | 507 | 9.618 2953 | 594   | 0.381 7047 | 9.965 4582 | 88 | 0  | 27 |
|    | 10 | 9.583 8042 | 507 | 9.618 3548 | 594   | 0.381 6452 | 9.965 4494 | 87 | 50 |    |
|    | 20 | 9.583 8549 | 507 | 9.618 4142 | 595   | 0.381 5858 | 9.965 4407 | 88 | 40 |    |
|    | 30 | 9.583 9056 | 507 | 9.618 4737 | 594   | 0.381 5263 | 9.965 4319 | 87 | 30 |    |
|    | 40 | 9.583 9563 | 506 | 9.618 5331 | 594   | 0.381 4669 | 9.965 4232 | 88 | 20 |    |
|    | 50 | 9.584 0069 | 507 | 9.618 5925 | 594   | 0.381 4075 | 9.965 4144 | 87 | 10 |    |
| 34 | 0  | 9.584 0576 | 507 | 9.618 6519 | 594   | 0.381 3481 | 9.965 4057 | 88 | 0  | 26 |
|    | 10 | 9.584 1083 | 506 | 9.618 7113 | 594   | 0.381 2887 | 9.965 3969 | 87 | 50 |    |
|    | 20 | 9.584 1589 | 507 | 9.618 7707 | 594   | 0.381 2293 | 9.965 3882 | 88 | 40 |    |
|    | 30 | 9.584 2096 | 506 | 9.618 8301 | 594   | 0.381 1699 | 9.965 3794 | 87 | 30 |    |
|    | 40 | 9.584 2602 | 507 | 9.618 8895 | 594   | 0.381 1105 | 9.965 3707 | 88 | 20 |    |
|    | 50 | 9.584 3109 | 506 | 9.618 9489 | 594   | 0.381 0511 | 9.965 3619 | 87 | 10 |    |
| 35 | 0  | 9.584 3615 | 506 | 9.619 0083 | 594   | 0.380 9917 | 9.965 3532 | 88 | 0  | 25 |
|    | 10 | 9.584 4121 | 506 | 9.619 0677 | 594   | 0.380 9323 | 9.965 3444 | 87 | 50 |    |
|    | 20 | 9.584 4627 | 506 | 9.619 1271 | 593   | 0.380 8729 | 9.965 3357 | 88 | 40 |    |
|    | 30 | 9.584 5133 | 506 | 9.619 1864 | 594   | 0.380 8136 | 9.965 3269 | 88 | 30 |    |
|    | 40 | 9.584 5639 | 506 | 9.619 2458 | 593   | 0.380 7542 | 9.965 3181 | 87 | 20 |    |
|    | 50 | 9.584 6145 | 506 | 9.619 3051 | 594   | 0.380 6949 | 9.965 3094 | 88 | 10 |    |
| 36 | 0  | 9.584 6651 | 506 | 9.619 3645 | 593   | 0.380 6355 | 9.965 3006 | 88 | 0  | 24 |
|    | 10 | 9.584 7157 | 505 | 9.619 4238 | 594   | 0.380 5762 | 9.965 2918 | 87 | 50 |    |
|    | 20 | 9.584 7662 | 506 | 9.619 4832 | 593   | 0.380 5168 | 9.965 2831 | 88 | 40 |    |
|    | 30 | 9.584 8168 | 506 | 9.619 5425 | 593   | 0.380 4575 | 9.965 2743 | 88 | 30 |    |
|    | 40 | 9.584 8674 | 505 | 9.619 6018 | 594   | 0.380 3982 | 9.965 2655 | 87 | 20 |    |
|    | 50 | 9.584 9179 | 506 | 9.619 6612 | 593   | 0.380 3388 | 9.965 2568 | 88 | 10 |    |
| 37 | 0  | 9.584 9685 | 505 | 9.619 7205 | 593   | 0.380 2795 | 9.965 2480 | 88 | 0  | 23 |
|    | 10 | 9.585 0190 | 505 | 9.619 7798 | 593   | 0.380 2202 | 9.965 2392 | 88 | 50 |    |
|    | 20 | 9.585 0695 | 506 | 9.619 8391 | 593   | 0.380 1609 | 9.965 2304 | 87 | 40 |    |
|    | 30 | 9.585 1201 | 505 | 9.619 8984 | 593   | 0.380 1016 | 9.965 2217 | 88 | 30 |    |
|    | 40 | 9.585 1706 | 505 | 9.619 9577 | 593   | 0.380 0423 | 9.965 2129 | 88 | 20 |    |
|    | 50 | 9.585 2211 | 505 | 9.620 0170 | 592   | 0.379 9830 | 9.965 2041 | 88 | 10 |    |
| 38 | 0  | 9.585 2716 | 505 | 9.620 0762 | 593   | 0.379 9238 | 9.965 1953 | 87 | 0  | 22 |
|    | 10 | 9.585 3221 | 505 | 9.620 1355 | 593   | 0.379 8645 | 9.965 1866 | 88 | 50 |    |
|    | 20 | 9.585 3726 | 504 | 9.620 1948 | 592   | 0.379 8052 | 9.965 1778 | 88 | 40 |    |
|    | 30 | 9.585 4230 | 505 | 9.620 2540 | 593   | 0.379 7460 | 9.965 1690 | 88 | 30 |    |
|    | 40 | 9.585 4735 | 505 | 9.620 3133 | 593   | 0.379 6867 | 9.965 1602 | 88 | 20 |    |
|    | 50 | 9.585 5240 | 505 | 9.620 3726 | 592   | 0.379 6274 | 9.965 1514 | 88 | 10 |    |
| 39 | 0  | 9.585 5745 | 504 | 9.620 4318 | 592   | 0.379 5682 | 9.965 1426 | 87 | 0  | 21 |
|    | 10 | 9.585 6249 | 505 | 9.620 4910 | 593   | 0.379 5090 | 9.965 1339 | 88 | 50 |    |
|    | 20 | 9.585 6754 | 505 | 9.620 5503 | 592   | 0.379 4497 | 9.965 1251 | 88 | 40 |    |
|    | 30 | 9.585 7258 | 504 | 9.620 6095 | 592   | 0.379 3905 | 9.965 1163 | 88 | 30 |    |
|    | 40 | 9.585 7762 | 505 | 9.620 6687 | 593   | 0.379 3313 | 9.965 1075 | 88 | 20 |    |
|    | 50 | 9.585 8267 | 504 | 9.620 7280 | 592   | 0.379 2720 | 9.965 0987 | 88 | 10 |    |
| 40 | 0  | 9.585 8771 | 504 | 9.620 7872 | 592   | 0.379 2128 | 9.965 0899 | 88 | 0  | 20 |
|    | "  | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d. | "  |    |

595

1 59.5  
2 129.0  
3 178.5  
4 238.0  
5 297.5  
6 357.0  
7 416.5  
8 476.0  
9 535.5

594

1 59.4  
2 118.8  
3 178.2  
4 237.6  
5 297.0  
6 356.4  
7 415.8  
8 475.2  
9 534.6

593

1 59.3  
2 118.6  
3 177.9  
4 237.2  
5 296.5  
6 355.8  
7 415.1  
8 474.4  
9 533.7

592

1 59.2  
2 118.4  
3 177.1  
4 236.5  
5 295.8  
6 355.1  
7 414.4  
8 473.7  
9 533.0

591

1 59.1  
2 118.1  
3 176.6  
4 235.8  
5 295.1  
6 354.4  
7 413.9  
8 473.0  
9 532.3

590

1 59.0  
2 117.9  
3 176.1  
4 235.1  
5 294.4  
6 353.7  
7 413.1  
8 472.3  
9 531.5







|    | "  | Sin        | d.  | Tang       | d. e. | Cotg       | Cos        | d. | "  | '  |
|----|----|------------|-----|------------|-------|------------|------------|----|----|----|
| 50 | 0  | 9.588 8897 | 500 | 9.624 3296 | 589   | 0.375 6704 | 9.964 5602 | 89 | 0  | 10 |
|    | 10 | 9.588 9397 | 500 | 9.624 3885 | 588   | 0.375 6115 | 9.964 5513 | 89 | 50 |    |
|    | 20 | 9.588 9897 | 500 | 9.624 4473 | 589   | 0.375 5527 | 9.964 5424 | 88 | 40 |    |
|    | 30 | 9.589 0397 | 500 | 9.624 5062 | 588   | 0.375 4938 | 9.964 5336 | 89 | 30 |    |
|    | 40 | 9.589 0897 | 500 | 9.624 5650 | 589   | 0.375 4350 | 9.964 5247 | 89 | 20 |    |
|    | 50 | 9.589 1397 | 500 | 9.624 6239 | 588   | 0.375 3761 | 9.964 5158 | 89 | 10 |    |
| 51 | 0  | 9.589 1897 | 499 | 9.624 6827 | 589   | 0.375 3173 | 9.964 5069 | 88 | 0  | 9  |
|    | 10 | 9.589 2396 | 500 | 9.624 7416 | 588   | 0.375 2584 | 9.964 4981 | 89 | 50 |    |
|    | 20 | 9.589 2896 | 499 | 9.624 8004 | 588   | 0.375 1996 | 9.964 4892 | 89 | 40 |    |
|    | 30 | 9.589 3395 | 500 | 9.624 8592 | 588   | 0.375 1408 | 9.964 4803 | 89 | 30 |    |
|    | 40 | 9.589 3895 | 499 | 9.624 9180 | 588   | 0.375 0820 | 9.964 4714 | 88 | 20 |    |
|    | 50 | 9.589 4394 | 499 | 9.624 9768 | 588   | 0.375 0232 | 9.964 4626 | 89 | 10 |    |
| 52 | 0  | 9.589 4893 | 500 | 9.625 0356 | 589   | 0.374 9644 | 9.964 4537 | 89 | 0  | 8  |
|    | 10 | 9.589 5393 | 499 | 9.625 0945 | 587   | 0.374 9055 | 9.964 4448 | 89 | 50 |    |
|    | 20 | 9.589 5892 | 499 | 9.625 1532 | 588   | 0.374 8468 | 9.964 4359 | 89 | 40 |    |
|    | 30 | 9.589 6391 | 499 | 9.625 2120 | 588   | 0.374 7880 | 9.964 4270 | 88 | 30 |    |
|    | 40 | 9.589 6890 | 499 | 9.625 2708 | 588   | 0.374 7292 | 9.964 4182 | 89 | 20 |    |
|    | 50 | 9.589 7389 | 499 | 9.625 3296 | 588   | 0.374 6704 | 9.964 4093 | 89 | 10 |    |
| 53 | 0  | 9.589 7888 | 499 | 9.625 3884 | 588   | 0.374 6116 | 9.964 4004 | 89 | 0  | 7  |
|    | 10 | 9.589 8387 | 498 | 9.625 4472 | 587   | 0.374 5528 | 9.964 3915 | 89 | 50 |    |
|    | 20 | 9.589 8885 | 499 | 9.625 5059 | 588   | 0.374 4941 | 9.964 3826 | 89 | 40 |    |
|    | 30 | 9.589 9384 | 499 | 9.625 5647 | 587   | 0.374 4353 | 9.964 3737 | 89 | 30 |    |
|    | 40 | 9.589 9883 | 498 | 9.625 6234 | 588   | 0.374 3766 | 9.964 3648 | 89 | 20 |    |
|    | 50 | 9.590 0381 | 499 | 9.625 6822 | 587   | 0.374 3178 | 9.964 3559 | 89 | 10 |    |
| 54 | 0  | 9.590 0880 | 498 | 9.625 7409 | 587   | 0.374 2591 | 9.964 3470 | 88 | 0  | 6  |
|    | 10 | 9.590 1378 | 498 | 9.625 7996 | 588   | 0.374 2004 | 9.964 3382 | 89 | 50 |    |
|    | 20 | 9.590 1876 | 499 | 9.625 8584 | 587   | 0.374 1416 | 9.964 3293 | 89 | 40 |    |
|    | 30 | 9.590 2375 | 498 | 9.625 9171 | 587   | 0.374 0829 | 9.964 3204 | 89 | 30 |    |
|    | 40 | 9.590 2873 | 498 | 9.625 9758 | 587   | 0.374 0242 | 9.964 3115 | 89 | 20 |    |
|    | 50 | 9.590 3371 | 498 | 9.626 0345 | 587   | 0.373 9655 | 9.964 3026 | 89 | 10 |    |
| 55 | 0  | 9.590 3869 | 498 | 9.626 0932 | 587   | 0.373 9068 | 9.964 2937 | 89 | 0  | 5  |
|    | 10 | 9.590 4367 | 498 | 9.626 1519 | 587   | 0.373 8481 | 9.964 2848 | 89 | 50 |    |
|    | 20 | 9.590 4865 | 498 | 9.626 2106 | 587   | 0.373 7894 | 9.964 2759 | 89 | 40 |    |
|    | 30 | 9.590 5363 | 498 | 9.626 2693 | 587   | 0.373 7307 | 9.964 2670 | 90 | 30 |    |
|    | 40 | 9.590 5861 | 497 | 9.626 3280 | 587   | 0.373 6720 | 9.964 2580 | 89 | 20 |    |
|    | 50 | 9.590 6358 | 497 | 9.626 3867 | 587   | 0.373 6133 | 9.964 2491 | 89 | 10 |    |
| 56 | 0  | 9.590 6856 | 498 | 9.626 4454 | 586   | 0.373 5546 | 9.964 2402 | 89 | 0  | 4  |
|    | 10 | 9.590 7354 | 497 | 9.626 5041 | 587   | 0.373 4960 | 9.964 2313 | 89 | 50 |    |
|    | 20 | 9.590 7851 | 498 | 9.626 5627 | 587   | 0.373 4373 | 9.964 2224 | 89 | 40 |    |
|    | 30 | 9.590 8349 | 497 | 9.626 6214 | 586   | 0.373 3786 | 9.964 2135 | 89 | 30 |    |
|    | 40 | 9.590 8846 | 497 | 9.626 6800 | 587   | 0.373 3200 | 9.964 2046 | 89 | 20 |    |
|    | 50 | 9.590 9343 | 497 | 9.626 7387 | 586   | 0.373 2613 | 9.964 1957 | 89 | 10 |    |
| 57 | 0  | 9.590 9841 | 497 | 9.626 7973 | 587   | 0.373 2027 | 9.964 1868 | 90 | 0  | 3  |
|    | 10 | 9.591 0338 | 497 | 9.626 8560 | 586   | 0.373 1440 | 9.964 1778 | 89 | 50 |    |
|    | 20 | 9.591 0835 | 497 | 9.626 9146 | 586   | 0.373 0854 | 9.964 1689 | 89 | 40 |    |
|    | 30 | 9.591 1332 | 497 | 9.626 9732 | 586   | 0.373 0268 | 9.964 1600 | 89 | 30 |    |
|    | 40 | 9.591 1829 | 497 | 9.627 0318 | 586   | 0.372 9682 | 9.964 1511 | 89 | 20 |    |
|    | 50 | 9.591 2326 | 497 | 9.627 0904 | 587   | 0.372 9096 | 9.964 1422 | 90 | 10 |    |
| 58 | 0  | 9.591 2823 | 497 | 9.627 1491 | 586   | 0.372 8509 | 9.964 1332 | 89 | 0  | 2  |
|    | 10 | 9.591 3320 | 496 | 9.627 2077 | 586   | 0.372 7923 | 9.964 1243 | 89 | 50 |    |
|    | 20 | 9.591 3816 | 497 | 9.627 2663 | 585   | 0.372 7337 | 9.964 1154 | 89 | 40 |    |
|    | 30 | 9.591 4313 | 497 | 9.627 3248 | 586   | 0.372 6752 | 9.964 1065 | 90 | 30 |    |
|    | 40 | 9.591 4810 | 496 | 9.627 3834 | 586   | 0.372 6166 | 9.964 0975 | 89 | 20 |    |
|    | 50 | 9.591 5306 | 497 | 9.627 4420 | 586   | 0.372 5580 | 9.964 0886 | 89 | 10 |    |
| 59 | 0  | 9.591 5803 | 496 | 9.627 5006 | 586   | 0.372 4994 | 9.964 0797 | 89 | 0  | 1  |
|    | 10 | 9.591 6299 | 496 | 9.627 5592 | 585   | 0.372 4408 | 9.964 0708 | 90 | 50 |    |
|    | 20 | 9.591 6795 | 497 | 9.627 6177 | 586   | 0.372 3823 | 9.964 0618 | 89 | 40 |    |
|    | 30 | 9.591 7292 | 496 | 9.627 6763 | 585   | 0.372 3237 | 9.964 0529 | 89 | 30 |    |
|    | 40 | 9.591 7788 | 496 | 9.627 7348 | 586   | 0.372 2652 | 9.964 0440 | 90 | 20 |    |
|    | 50 | 9.591 8284 | 496 | 9.627 7934 | 585   | 0.372 2066 | 9.964 0350 | 89 | 10 |    |
| 60 | 0  | 9.591 8780 | 496 | 9.627 8519 | 585   | 0.372 1481 | 9.964 0261 | 89 | 0  | 0  |
|    |    |            |     |            |       |            |            |    |    |    |
|    | "  | Cos        | d.  | Cotg       | d. e. | Tang       | Sin        | d. | "  | '  |



585  
1 58.5  
2 117.0  
3 175.5  
4 234.0  
5 292.5  
6 351.0  
7 409.5  
8 468.0  
9 526.5

588  
1 58.3  
2 116.6  
3 174.9  
4 233.2  
5 291.5  
6 349.8  
7 408.1  
8 466.4  
9 524.7

495  
1 49.5  
2 99.0  
3 148.5  
4 198.0  
5 247.5  
6 297.0  
7 346.5  
8 396.0  
9 445.5

494  
1 49.4  
2 98.8  
3 148.2  
4 197.6  
5 247.0  
6 296.4  
7 345.8  
8 395.2  
9 444.6

403  
1 49.3  
2 98.6  
3 147.9  
4 197.2  
5 246.5  
6 295.8  
7 345.1  
8 394.4  
9 443.7

80  
1 8.0  
2 17.8  
3 26.7  
4 35.6  
5 44.5  
6 53.4  
7 62.3  
8 71.2  
9 80.1

|    | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d. | "  |    |
|----|----|------------|-----|------------|-------|------------|------------|----|----|----|
| 0  | 0  | 9.591 8780 | 496 | 9.627 8519 | 586   | 0.372 1481 | 9.964 0261 | 90 | 0  | 60 |
|    | 10 | 9.591 9276 | 496 | 9.627 9105 | 585   | 0.372 0895 | 9.964 0171 | 89 | 50 |    |
|    | 20 | 9.591 9772 | 496 | 9.627 9690 | 585   | 0.372 0310 | 9.964 0082 | 89 | 40 |    |
|    | 30 | 9.592 0268 | 496 | 9.628 0275 | 585   | 0.371 9725 | 9.963 9993 | 89 | 30 |    |
|    | 40 | 9.592 0764 | 496 | 9.628 0860 | 586   | 0.371 9140 | 9.963 9903 | 89 | 20 |    |
|    | 50 | 9.592 1259 | 496 | 9.628 1446 | 585   | 0.371 8554 | 9.963 9814 | 90 | 10 |    |
| 1  | 0  | 9.592 1755 | 496 | 9.628 2031 | 585   | 0.371 7969 | 9.963 9724 | 89 | 0  | 59 |
|    | 10 | 9.592 2251 | 495 | 9.628 2616 | 585   | 0.371 7384 | 9.963 9635 | 90 | 50 |    |
|    | 20 | 9.592 2746 | 496 | 9.628 3201 | 585   | 0.371 6799 | 9.963 9545 | 89 | 40 |    |
|    | 30 | 9.592 3242 | 495 | 9.628 3786 | 585   | 0.371 6214 | 9.963 9456 | 90 | 30 |    |
|    | 40 | 9.592 3737 | 495 | 9.628 4371 | 584   | 0.371 5629 | 9.963 9366 | 89 | 20 |    |
|    | 50 | 9.592 4232 | 496 | 9.628 4955 | 585   | 0.371 5045 | 9.963 9277 | 90 | 10 |    |
| 2  | 0  | 9.592 4728 | 495 | 9.628 5540 | 585   | 0.371 4460 | 9.963 9187 | 89 | 0  | 58 |
|    | 10 | 9.592 5223 | 495 | 9.628 6125 | 585   | 0.371 3875 | 9.963 9098 | 90 | 50 |    |
|    | 20 | 9.592 5718 | 495 | 9.628 6710 | 584   | 0.371 3290 | 9.963 9008 | 89 | 40 |    |
|    | 30 | 9.592 6213 | 495 | 9.628 7294 | 585   | 0.371 2706 | 9.963 8919 | 90 | 30 |    |
|    | 40 | 9.592 6708 | 495 | 9.628 7879 | 584   | 0.371 2121 | 9.963 8829 | 89 | 20 |    |
|    | 50 | 9.592 7203 | 495 | 9.628 8463 | 585   | 0.371 1537 | 9.963 8740 | 90 | 10 |    |
| 3  | 0  | 9.592 7698 | 495 | 9.628 9048 | 584   | 0.371 0952 | 9.963 8650 | 89 | 0  | 57 |
|    | 10 | 9.592 8193 | 494 | 9.628 9632 | 584   | 0.371 0368 | 9.963 8561 | 90 | 50 |    |
|    | 20 | 9.592 8687 | 495 | 9.629 0216 | 585   | 0.370 9784 | 9.963 8471 | 90 | 40 |    |
|    | 30 | 9.592 9182 | 495 | 9.629 0801 | 584   | 0.370 9199 | 9.963 8381 | 89 | 30 |    |
|    | 40 | 9.592 9677 | 494 | 9.629 1385 | 584   | 0.370 8615 | 9.963 8292 | 90 | 20 |    |
|    | 50 | 9.593 0171 | 495 | 9.629 1969 | 584   | 0.370 8031 | 9.963 8202 | 90 | 10 |    |
| 4  | 0  | 9.593 0666 | 494 | 9.629 2553 | 584   | 0.370 7447 | 9.963 8112 | 89 | 0  | 56 |
|    | 10 | 9.593 1160 | 494 | 9.629 3137 | 584   | 0.370 6863 | 9.963 8023 | 90 | 50 |    |
|    | 20 | 9.593 1654 | 494 | 9.629 3721 | 584   | 0.370 6279 | 9.963 7933 | 90 | 40 |    |
|    | 30 | 9.593 2149 | 495 | 9.629 4305 | 584   | 0.370 5695 | 9.963 7843 | 89 | 30 |    |
|    | 40 | 9.593 2643 | 494 | 9.629 4889 | 584   | 0.370 5111 | 9.963 7754 | 90 | 20 |    |
|    | 50 | 9.593 3137 | 494 | 9.629 5473 | 584   | 0.370 4527 | 9.963 7664 | 90 | 10 |    |
| 5  | 0  | 9.593 3631 | 494 | 9.629 6057 | 584   | 0.370 3943 | 9.963 7574 | 90 | 0  | 55 |
|    | 10 | 9.593 4125 | 494 | 9.629 6641 | 583   | 0.370 3359 | 9.963 7484 | 89 | 50 |    |
|    | 20 | 9.593 4619 | 494 | 9.629 7224 | 584   | 0.370 2776 | 9.963 7395 | 90 | 40 |    |
|    | 30 | 9.593 5113 | 494 | 9.629 7808 | 583   | 0.370 2192 | 9.963 7305 | 90 | 30 |    |
|    | 40 | 9.593 5607 | 493 | 9.629 8391 | 584   | 0.370 1609 | 9.963 7215 | 90 | 20 |    |
|    | 50 | 9.593 6100 | 494 | 9.629 8975 | 583   | 0.370 1025 | 9.963 7125 | 89 | 10 |    |
| 6  | 0  | 9.593 6594 | 494 | 9.629 9558 | 584   | 0.370 0442 | 9.963 7036 | 90 | 0  | 54 |
|    | 10 | 9.593 7088 | 493 | 9.630 0142 | 583   | 0.369 9858 | 9.963 6946 | 90 | 50 |    |
|    | 20 | 9.593 7581 | 494 | 9.630 0725 | 583   | 0.369 9275 | 9.963 6856 | 90 | 40 |    |
|    | 30 | 9.593 8075 | 493 | 9.630 1308 | 584   | 0.369 8692 | 9.963 6766 | 90 | 30 |    |
|    | 40 | 9.593 8568 | 493 | 9.630 1892 | 583   | 0.369 8108 | 9.963 6676 | 90 | 20 |    |
|    | 50 | 9.593 9061 | 494 | 9.630 2475 | 583   | 0.369 7525 | 9.963 6586 | 89 | 10 |    |
| 7  | 0  | 9.593 9555 | 493 | 9.630 3058 | 583   | 0.369 6942 | 9.963 6496 | 90 | 0  | 53 |
|    | 10 | 9.594 0048 | 493 | 9.630 3641 | 583   | 0.369 6359 | 9.963 6407 | 90 | 50 |    |
|    | 20 | 9.594 0541 | 493 | 9.630 4224 | 583   | 0.369 5776 | 9.963 6317 | 90 | 40 |    |
|    | 30 | 9.594 1034 | 493 | 9.630 4807 | 583   | 0.369 5193 | 9.963 6227 | 90 | 30 |    |
|    | 40 | 9.594 1527 | 493 | 9.630 5390 | 583   | 0.369 4610 | 9.963 6137 | 90 | 20 |    |
|    | 50 | 9.594 2020 | 493 | 9.630 5973 | 583   | 0.369 4027 | 9.963 6047 | 90 | 10 |    |
| 8  | 0  | 9.594 2513 | 493 | 9.630 6556 | 583   | 0.369 3444 | 9.963 5957 | 90 | 0  | 52 |
|    | 10 | 9.594 3006 | 492 | 9.630 7139 | 582   | 0.369 2861 | 9.963 5867 | 90 | 50 |    |
|    | 20 | 9.594 3498 | 493 | 9.630 7721 | 583   | 0.369 2279 | 9.963 5777 | 90 | 40 |    |
|    | 30 | 9.594 3991 | 493 | 9.630 8304 | 583   | 0.369 1696 | 9.963 5687 | 90 | 30 |    |
|    | 40 | 9.594 4484 | 492 | 9.630 8887 | 582   | 0.369 1113 | 9.963 5597 | 90 | 20 |    |
|    | 50 | 9.594 4976 | 493 | 9.630 9469 | 583   | 0.369 0531 | 9.963 5507 | 90 | 10 |    |
| 9  | 0  | 9.594 5469 | 492 | 9.631 0052 | 582   | 0.368 9948 | 9.963 5417 | 90 | 0  | 51 |
|    | 10 | 9.594 5961 | 492 | 9.631 0634 | 582   | 0.368 9366 | 9.963 5327 | 90 | 50 |    |
|    | 20 | 9.594 6453 | 493 | 9.631 1216 | 583   | 0.368 8784 | 9.963 5237 | 90 | 40 |    |
|    | 30 | 9.594 6946 | 492 | 9.631 1799 | 582   | 0.368 8201 | 9.963 5147 | 90 | 30 |    |
|    | 40 | 9.594 7438 | 492 | 9.631 2381 | 582   | 0.368 7619 | 9.963 5057 | 90 | 20 |    |
|    | 50 | 9.594 7930 | 492 | 9.631 2963 | 582   | 0.368 7037 | 9.963 4967 | 90 | 10 |    |
| 10 | 0  | 9.594 8422 | 492 | 9.631 3545 | 582   | 0.368 6455 | 9.963 4877 | 90 | 0  | 50 |
|    |    | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d. | "  |    |



|    | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d. | "  |    |
|----|----|------------|-----|------------|-------|------------|------------|----|----|----|
| 10 | o  | 9.594 8422 | 492 | 9.631 3545 | 582   | 0.368 6455 | 9.963 4877 | 90 | o  | 50 |
|    | 10 | 9.594 8914 | 492 | 9.631 4127 | 583   | 0.368 5873 | 9.963 4787 | 91 | 50 |    |
|    | 20 | 9.594 9406 | 492 | 9.631 4710 | 582   | 0.368 5290 | 9.963 4696 | 90 | 40 |    |
|    | 30 | 9.594 9898 | 492 | 9.631 5292 | 582   | 0.368 4708 | 9.963 4606 | 90 | 30 |    |
|    | 40 | 9.595 0390 | 491 | 9.631 5874 | 581   | 0.368 4126 | 9.963 4516 | 90 | 20 |    |
|    | 50 | 9.595 0881 | 492 | 9.631 6455 | 582   | 0.368 3545 | 9.963 4426 | 90 | 10 |    |
| 11 | o  | 9.595 1373 | 492 | 9.631 7037 | 582   | 0.368 2963 | 9.963 4336 | 90 | o  | 49 |
|    | 10 | 9.595 1865 | 491 | 9.631 7619 | 582   | 0.368 2381 | 9.963 4246 | 90 | 50 |    |
|    | 20 | 9.595 2356 | 492 | 9.631 8201 | 581   | 0.368 1799 | 9.963 4156 | 91 | 40 |    |
|    | 30 | 9.595 2848 | 491 | 9.631 8782 | 582   | 0.368 1218 | 9.963 4065 | 91 | 30 |    |
|    | 40 | 9.595 3339 | 492 | 9.631 9364 | 582   | 0.368 0636 | 9.963 3975 | 90 | 20 |    |
|    | 50 | 9.595 3831 | 491 | 9.631 9946 | 581   | 0.368 0054 | 9.963 3885 | 90 | 10 |    |
| 12 | o  | 9.595 4322 | 491 | 9.632 0527 | 582   | 0.367 9473 | 9.963 3795 | 91 | o  | 48 |
|    | 10 | 9.595 4813 | 491 | 9.632 1109 | 581   | 0.367 8891 | 9.963 3704 | 90 | 50 |    |
|    | 20 | 9.595 5304 | 491 | 9.632 1690 | 581   | 0.367 8310 | 9.963 3614 | 90 | 40 |    |
|    | 30 | 9.595 5795 | 491 | 9.632 2271 | 582   | 0.367 7729 | 9.963 3524 | 90 | 30 |    |
|    | 40 | 9.595 6286 | 491 | 9.632 2853 | 581   | 0.367 7147 | 9.963 3434 | 91 | 20 |    |
|    | 50 | 9.595 6777 | 491 | 9.632 3434 | 581   | 0.367 6566 | 9.963 3343 | 90 | 10 |    |
| 13 | o  | 9.595 7268 | 491 | 9.632 4015 | 581   | 0.367 5985 | 9.963 3253 | 90 | o  | 47 |
|    | 10 | 9.595 7759 | 491 | 9.632 4596 | 581   | 0.367 5404 | 9.963 3163 | 91 | 50 |    |
|    | 20 | 9.595 8250 | 490 | 9.632 5177 | 582   | 0.367 4823 | 9.963 3072 | 90 | 40 |    |
|    | 30 | 9.595 8740 | 491 | 9.632 5759 | 581   | 0.367 4241 | 9.963 2982 | 90 | 30 |    |
|    | 40 | 9.595 9231 | 491 | 9.632 6340 | 580   | 0.367 3660 | 9.963 2892 | 91 | 20 |    |
|    | 50 | 9.595 9722 | 490 | 9.632 6920 | 581   | 0.367 3080 | 9.963 2801 | 90 | 10 |    |
| 14 | o  | 9.596 0212 | 491 | 9.632 7501 | 581   | 0.367 2499 | 9.963 2711 | 91 | o  | 46 |
|    | 10 | 9.596 0703 | 490 | 9.632 8082 | 581   | 0.367 1918 | 9.963 2620 | 90 | 50 |    |
|    | 20 | 9.596 1193 | 490 | 9.632 8663 | 581   | 0.367 1337 | 9.963 2530 | 90 | 40 |    |
|    | 30 | 9.596 1683 | 491 | 9.632 9244 | 580   | 0.367 0756 | 9.963 2440 | 91 | 30 |    |
|    | 40 | 9.596 2174 | 491 | 9.632 9824 | 581   | 0.367 0176 | 9.963 2349 | 90 | 20 |    |
|    | 50 | 9.596 2664 | 490 | 9.633 0405 | 580   | 0.366 9595 | 9.963 2259 | 91 | 10 |    |
| 15 | o  | 9.596 3154 | 490 | 9.633 0985 | 581   | 0.366 9015 | 9.963 2168 | 90 | o  | 45 |
|    | 10 | 9.596 3644 | 490 | 9.633 1566 | 580   | 0.366 8434 | 9.963 2078 | 91 | 50 |    |
|    | 20 | 9.596 4134 | 490 | 9.633 2146 | 581   | 0.366 7854 | 9.963 1987 | 90 | 40 |    |
|    | 30 | 9.596 4624 | 490 | 9.633 2727 | 580   | 0.366 7273 | 9.963 1897 | 90 | 30 |    |
|    | 40 | 9.596 5114 | 489 | 9.633 3307 | 580   | 0.366 6693 | 9.963 1806 | 91 | 20 |    |
|    | 50 | 9.596 5603 | 489 | 9.633 3887 | 581   | 0.366 6113 | 9.963 1716 | 91 | 10 |    |
| 16 | o  | 9.596 6093 | 490 | 9.633 4468 | 580   | 0.366 5532 | 9.963 1625 | 90 | o  | 44 |
|    | 10 | 9.596 6583 | 489 | 9.633 5048 | 580   | 0.366 4952 | 9.963 1535 | 91 | 50 |    |
|    | 20 | 9.596 7072 | 490 | 9.633 5628 | 580   | 0.366 4372 | 9.963 1444 | 90 | 40 |    |
|    | 30 | 9.596 7562 | 489 | 9.633 6208 | 580   | 0.366 3792 | 9.963 1354 | 91 | 30 |    |
|    | 40 | 9.596 8051 | 490 | 9.633 6788 | 580   | 0.366 3212 | 9.963 1263 | 90 | 20 |    |
|    | 50 | 9.596 8541 | 489 | 9.633 7368 | 580   | 0.366 2632 | 9.963 1173 | 91 | 10 |    |
| 17 | o  | 9.596 9030 | 489 | 9.633 7948 | 580   | 0.366 2052 | 9.963 1082 | 90 | o  | 43 |
|    | 10 | 9.596 9519 | 489 | 9.633 8528 | 580   | 0.366 1472 | 9.963 0991 | 91 | 50 |    |
|    | 20 | 9.597 0008 | 490 | 9.633 9108 | 579   | 0.366 0892 | 9.963 0901 | 91 | 40 |    |
|    | 30 | 9.597 0498 | 489 | 9.633 9687 | 580   | 0.366 0313 | 9.963 0810 | 90 | 30 |    |
|    | 40 | 9.597 0987 | 489 | 9.634 0267 | 580   | 0.365 9733 | 9.963 0719 | 91 | 20 |    |
|    | 50 | 9.597 1476 | 489 | 9.634 0847 | 579   | 0.365 9153 | 9.963 0629 | 90 | 10 |    |
| 18 | o  | 9.597 1965 | 488 | 9.634 1426 | 580   | 0.365 8574 | 9.963 0538 | 91 | o  | 42 |
|    | 10 | 9.597 2453 | 489 | 9.634 2006 | 579   | 0.365 7994 | 9.963 0447 | 90 | 50 |    |
|    | 20 | 9.597 2942 | 489 | 9.634 2585 | 580   | 0.365 7415 | 9.963 0357 | 91 | 40 |    |
|    | 30 | 9.597 3431 | 489 | 9.634 3165 | 579   | 0.365 6835 | 9.963 0266 | 90 | 30 |    |
|    | 40 | 9.597 3920 | 488 | 9.634 3744 | 580   | 0.365 6256 | 9.963 0175 | 90 | 20 |    |
|    | 50 | 9.597 4408 | 489 | 9.634 4324 | 579   | 0.365 5676 | 9.963 0085 | 91 | 10 |    |
| 19 | o  | 9.597 4897 | 488 | 9.634 4903 | 579   | 0.365 5097 | 9.962 9994 | 91 | o  | 41 |
|    | 10 | 9.597 5385 | 489 | 9.634 5482 | 579   | 0.365 4518 | 9.962 9903 | 91 | 50 |    |
|    | 20 | 9.597 5874 | 488 | 9.634 6061 | 579   | 0.365 3939 | 9.962 9812 | 91 | 40 |    |
|    | 30 | 9.597 6362 | 488 | 9.634 6640 | 580   | 0.365 3360 | 9.962 9721 | 90 | 30 |    |
|    | 40 | 9.597 6850 | 488 | 9.634 7220 | 579   | 0.365 2780 | 9.962 9631 | 91 | 20 |    |
|    | 50 | 9.597 7338 | 489 | 9.634 7799 | 579   | 0.365 2201 | 9.962 9540 | 91 | 10 |    |
| 20 | o  | 9.597 7827 |     | 9.634 8378 |       | 0.365 1622 | 9.962 9449 |    | o  | 40 |
|    |    |            |     |            |       |            |            |    |    |    |
|    |    | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d. | "  |    |

582  
1 58.2  
2 116.4  
3 174.6  
4 232.8  
5 291.0  
6 349.2  
7 407.4  
8 465.6  
9 523.8

581  
1 58.1  
2 116.2  
3 174.3  
4 232.4  
5 290.5  
6 348.6  
7 406.7  
8 464.8  
9 522.9

579  
1 57.9  
2 115.8  
3 173.7  
4 231.6  
5 289.5  
6 347.4  
7 405.3  
8 463.2  
9 521.1

491  
1 49.1  
2 98.2  
3 147.3  
4 196.4  
5 245.5  
6 294.6  
7 343.7  
8 392.8  
9 441.9

489  
1 48.9  
2 97.8  
3 146.7  
4 195.6  
5 244.5  
6 293.4  
7 342.3  
8 391.2  
9 440.1

91  
1 9.1  
2 18.2  
3 27.3  
4 36.4  
5 45.5  
6 54.6  
7 63.7  
8 72.8  
9 81.9



|       |    |            | sin | d.         | Tang | d. r       | Cotg       | Cos | d. |    |  |
|-------|----|------------|-----|------------|------|------------|------------|-----|----|----|--|
| 578   | 0  | 9.597 7837 | 438 | 9.634 8078 | 578  | 0.365 1611 | 9.935 0149 | 91  | 0  | 40 |  |
| 1 578 | 10 | 9.597 8115 | 438 | 9.634 8096 | 579  | 0.365 1614 | 9.935 0155 | 91  | 50 |    |  |
| 2 578 | 20 | 9.597 8384 | 438 | 9.634 8114 | 580  | 0.365 1616 | 9.935 0161 | 91  | 40 |    |  |
| 3 578 | 30 | 9.597 8641 | 438 | 9.634 8131 | 581  | 0.365 1618 | 9.935 0167 | 91  | 30 |    |  |
| 4 578 | 40 | 9.597 8899 | 438 | 9.634 8149 | 582  | 0.365 1620 | 9.935 0173 | 91  | 20 |    |  |
| 5 578 | 50 | 9.597 9156 | 438 | 9.634 8166 | 583  | 0.365 1622 | 9.935 0179 | 91  | 10 |    |  |
| 6 578 | 60 | 9.598 0414 | 438 | 9.634 8184 | 584  | 0.365 1624 | 9.935 0185 | 91  | 0  | 39 |  |
| 7 578 | 70 | 9.598 1671 | 438 | 9.634 8201 | 585  | 0.365 1626 | 9.935 0191 | 91  | 50 |    |  |
| 8 578 | 80 | 9.598 2929 | 438 | 9.634 8219 | 586  | 0.365 1628 | 9.935 0197 | 91  | 40 |    |  |
| 9 578 | 90 | 9.598 4186 | 438 | 9.634 8236 | 587  | 0.365 1630 | 9.935 0203 | 91  | 30 |    |  |
| 1 577 | 0  | 9.598 4444 | 438 | 9.634 8254 | 588  | 0.365 1632 | 9.935 0209 | 91  | 20 |    |  |
| 2 577 | 10 | 9.598 4701 | 438 | 9.634 8271 | 589  | 0.365 1634 | 9.935 0215 | 91  | 10 |    |  |
| 3 577 | 20 | 9.598 4959 | 438 | 9.634 8289 | 590  | 0.365 1636 | 9.935 0221 | 91  | 0  | 38 |  |
| 4 577 | 30 | 9.598 5216 | 438 | 9.634 8306 | 591  | 0.365 1638 | 9.935 0227 | 91  | 50 |    |  |
| 5 577 | 40 | 9.598 5474 | 438 | 9.634 8324 | 592  | 0.365 1640 | 9.935 0233 | 91  | 40 |    |  |
| 6 577 | 50 | 9.598 5731 | 438 | 9.634 8341 | 593  | 0.365 1642 | 9.935 0239 | 91  | 30 |    |  |
| 7 577 | 60 | 9.598 5989 | 438 | 9.634 8359 | 594  | 0.365 1644 | 9.935 0245 | 91  | 20 |    |  |
| 8 577 | 70 | 9.598 6246 | 438 | 9.634 8376 | 595  | 0.365 1646 | 9.935 0251 | 91  | 10 |    |  |
| 9 577 | 80 | 9.598 6504 | 438 | 9.634 8394 | 596  | 0.365 1648 | 9.935 0257 | 91  | 0  | 37 |  |
| 1 576 | 0  | 9.598 6761 | 438 | 9.634 8411 | 597  | 0.365 1650 | 9.935 0263 | 91  | 50 |    |  |
| 2 576 | 10 | 9.598 7019 | 438 | 9.634 8429 | 598  | 0.365 1652 | 9.935 0269 | 91  | 40 |    |  |
| 3 576 | 20 | 9.598 7276 | 438 | 9.634 8446 | 599  | 0.365 1654 | 9.935 0275 | 91  | 30 |    |  |
| 4 576 | 30 | 9.598 7534 | 438 | 9.634 8464 | 600  | 0.365 1656 | 9.935 0281 | 91  | 20 |    |  |
| 5 576 | 40 | 9.598 7791 | 438 | 9.634 8481 | 601  | 0.365 1658 | 9.935 0287 | 91  | 10 |    |  |
| 6 576 | 50 | 9.598 8049 | 438 | 9.634 8499 | 602  | 0.365 1660 | 9.935 0293 | 91  | 0  | 36 |  |
| 7 576 | 60 | 9.598 8306 | 438 | 9.634 8516 | 603  | 0.365 1662 | 9.935 0299 | 91  | 50 |    |  |
| 8 576 | 70 | 9.598 8564 | 438 | 9.634 8534 | 604  | 0.365 1664 | 9.935 0305 | 91  | 40 |    |  |
| 9 576 | 80 | 9.598 8821 | 438 | 9.634 8551 | 605  | 0.365 1666 | 9.935 0311 | 91  | 30 |    |  |
| 1 575 | 0  | 9.598 9079 | 438 | 9.634 8569 | 606  | 0.365 1668 | 9.935 0317 | 91  | 20 |    |  |
| 2 575 | 10 | 9.598 9336 | 438 | 9.634 8586 | 607  | 0.365 1670 | 9.935 0323 | 91  | 10 |    |  |
| 3 575 | 20 | 9.598 9594 | 438 | 9.634 8604 | 608  | 0.365 1672 | 9.935 0329 | 91  | 0  | 35 |  |
| 4 575 | 30 | 9.598 9851 | 438 | 9.634 8621 | 609  | 0.365 1674 | 9.935 0335 | 91  | 50 |    |  |
| 5 575 | 40 | 9.599 0109 | 438 | 9.634 8639 | 610  | 0.365 1676 | 9.935 0341 | 91  | 40 |    |  |
| 6 575 | 50 | 9.599 0366 | 438 | 9.634 8656 | 611  | 0.365 1678 | 9.935 0347 | 91  | 30 |    |  |
| 7 575 | 60 | 9.599 0624 | 438 | 9.634 8674 | 612  | 0.365 1680 | 9.935 0353 | 91  | 20 |    |  |
| 8 575 | 70 | 9.599 0881 | 438 | 9.634 8691 | 613  | 0.365 1682 | 9.935 0359 | 91  | 10 |    |  |
| 9 575 | 80 | 9.599 1139 | 438 | 9.634 8709 | 614  | 0.365 1684 | 9.935 0365 | 91  | 0  | 34 |  |
| 1 574 | 0  | 9.599 1396 | 438 | 9.634 8726 | 615  | 0.365 1686 | 9.935 0371 | 91  | 50 |    |  |
| 2 574 | 10 | 9.599 1654 | 438 | 9.634 8744 | 616  | 0.365 1688 | 9.935 0377 | 91  | 40 |    |  |
| 3 574 | 20 | 9.599 1911 | 438 | 9.634 8761 | 617  | 0.365 1690 | 9.935 0383 | 91  | 30 |    |  |
| 4 574 | 30 | 9.599 2169 | 438 | 9.634 8779 | 618  | 0.365 1692 | 9.935 0389 | 91  | 20 |    |  |
| 5 574 | 40 | 9.599 2426 | 438 | 9.634 8796 | 619  | 0.365 1694 | 9.935 0395 | 91  | 10 |    |  |
| 6 574 | 50 | 9.599 2684 | 438 | 9.634 8814 | 620  | 0.365 1696 | 9.935 0401 | 91  | 0  | 33 |  |
| 7 574 | 60 | 9.599 2941 | 438 | 9.634 8831 | 621  | 0.365 1698 | 9.935 0407 | 91  | 50 |    |  |
| 8 574 | 70 | 9.599 3199 | 438 | 9.634 8849 | 622  | 0.365 1700 | 9.935 0413 | 91  | 40 |    |  |
| 9 574 | 80 | 9.599 3456 | 438 | 9.634 8866 | 623  | 0.365 1702 | 9.935 0419 | 91  | 30 |    |  |
| 1 573 | 0  | 9.599 3714 | 438 | 9.634 8884 | 624  | 0.365 1704 | 9.935 0425 | 91  | 20 |    |  |
| 2 573 | 10 | 9.599 3971 | 438 | 9.634 8901 | 625  | 0.365 1706 | 9.935 0431 | 91  | 10 |    |  |
| 3 573 | 20 | 9.599 4229 | 438 | 9.634 8919 | 626  | 0.365 1708 | 9.935 0437 | 91  | 0  | 32 |  |
| 4 573 | 30 | 9.599 4486 | 438 | 9.634 8936 | 627  | 0.365 1710 | 9.935 0443 | 91  | 50 |    |  |
| 5 573 | 40 | 9.599 4744 | 438 | 9.634 8954 | 628  | 0.365 1712 | 9.935 0449 | 91  | 40 |    |  |
| 6 573 | 50 | 9.599 5001 | 438 | 9.634 8971 | 629  | 0.365 1714 | 9.935 0455 | 91  | 30 |    |  |
| 7 573 | 60 | 9.599 5259 | 438 | 9.634 8989 | 630  | 0.365 1716 | 9.935 0461 | 91  | 20 |    |  |
| 8 573 | 70 | 9.599 5516 | 438 | 9.634 9006 | 631  | 0.365 1718 | 9.935 0467 | 91  | 10 |    |  |
| 9 573 | 80 | 9.599 5774 | 438 | 9.634 9024 | 632  | 0.365 1720 | 9.935 0473 | 91  | 0  | 31 |  |
| 1 572 | 0  | 9.599 6031 | 438 | 9.634 9041 | 633  | 0.365 1722 | 9.935 0479 | 91  | 50 |    |  |
| 2 572 | 10 | 9.599 6289 | 438 | 9.634 9059 | 634  | 0.365 1724 | 9.935 0485 | 91  | 40 |    |  |
| 3 572 | 20 | 9.599 6546 | 438 | 9.634 9076 | 635  | 0.365 1726 | 9.935 0491 | 91  | 30 |    |  |
| 4 572 | 30 | 9.599 6804 | 438 | 9.634 9094 | 636  | 0.365 1728 | 9.935 0497 | 91  | 20 |    |  |
| 5 572 | 40 | 9.599 7061 | 438 | 9.634 9111 | 637  | 0.365 1730 | 9.935 0503 | 91  | 10 |    |  |
| 6 572 | 50 | 9.599 7319 | 438 | 9.634 9129 | 638  | 0.365 1732 | 9.935 0509 | 91  | 0  | 30 |  |
| 7 572 | 60 | 9.599 7576 | 438 | 9.634 9146 | 639  | 0.365 1734 | 9.935 0515 | 91  | 50 |    |  |
| 8 572 | 70 | 9.599 7834 | 438 | 9.634 9164 | 640  | 0.365 1736 | 9.935 0521 | 91  | 40 |    |  |
| 9 572 | 80 | 9.599 8091 | 438 | 9.634 9181 | 641  | 0.365 1738 | 9.935 0527 | 91  | 30 |    |  |
| 1 571 | 0  | 9.599 8349 | 438 | 9.634 9199 | 642  | 0.365 1740 | 9.935 0533 | 91  | 20 |    |  |
| 2 571 | 10 | 9.599 8606 | 438 | 9.634 9216 | 643  | 0.365 1742 | 9.935 0539 | 91  | 10 |    |  |
| 3 571 | 20 | 9.599 8864 | 438 | 9.634 9234 | 644  | 0.365 1744 | 9.935 0545 | 91  | 0  | 29 |  |
| 4 571 | 30 | 9.599 9121 | 438 | 9.634 9251 | 645  | 0.365 1746 | 9.935 0551 | 91  | 50 |    |  |
| 5 571 | 40 | 9.599 9379 | 438 | 9.634 9269 | 646  | 0.365 1748 | 9.935 0557 | 91  | 40 |    |  |
| 6 571 | 50 | 9.599 9636 | 438 | 9.634 9286 | 647  | 0.365 1750 | 9.935 0563 | 91  | 30 |    |  |
| 7 571 | 60 | 9.599 9894 | 438 | 9.634 9304 | 648  | 0.365 1752 | 9.935 0569 | 91  | 20 |    |  |
| 8 571 | 70 | 9.600 0151 | 438 | 9.634 9321 | 649  | 0.365 1754 | 9.935 0575 | 91  | 10 |    |  |
| 9 571 | 80 | 9.600 0409 | 438 | 9.634 9339 | 650  | 0.365 1756 | 9.935 0581 | 91  | 0  | 28 |  |
| 1 570 | 0  | 9.600 0666 | 438 | 9.634 9356 | 651  | 0.365 1758 | 9.935 0587 | 91  | 50 |    |  |
| 2 570 | 10 | 9.600 0924 | 438 | 9.634 9374 | 652  | 0.365 1760 | 9.935 0593 | 91  | 40 |    |  |
| 3 570 | 20 | 9.600 1181 | 438 | 9.634 9391 | 653  | 0.365 1762 | 9.935 0599 | 91  | 30 |    |  |
| 4 570 | 30 | 9.600 1439 | 438 | 9.634 9409 | 654  | 0.365 1764 | 9.935 0605 | 91  | 20 |    |  |
| 5 570 | 40 | 9.600 1696 | 438 | 9.634 9426 | 655  | 0.365 1766 | 9.935 0611 | 91  | 10 |    |  |
| 6 570 | 50 | 9.600 1954 | 438 | 9.634 9444 | 656  | 0.365 1768 | 9.935 0617 | 91  | 0  | 27 |  |
| 7 570 | 60 | 9.600 2211 | 438 | 9.634 9461 | 657  | 0.365 1770 | 9.935 0623 | 91  | 50 |    |  |
| 8 570 | 70 | 9.600 2469 | 438 | 9.634 9479 | 658  | 0.365 1772 | 9.935 0629 | 91  | 40 |    |  |
| 9 570 | 80 | 9.600 2726 | 438 | 9.634 9496 | 659  | 0.365 1774 | 9.935 0635 | 91  | 30 |    |  |
| 1 569 | 0  | 9.600 2984 | 438 | 9.634 9514 | 660  | 0.365 1776 | 9.935 0641 | 91  | 20 |    |  |
| 2 569 | 10 | 9.600 3241 | 438 | 9.634 9531 | 661  | 0.365 1778 | 9.935 0647 | 91  | 10 |    |  |
| 3 569 | 20 | 9.600 3499 | 438 | 9.634 9549 | 662  | 0.365 1780 | 9.935 0653 | 91  | 0  | 26 |  |
| 4 569 | 30 | 9.600 3756 | 438 | 9.634 9566 | 663  | 0.365 1782 | 9.935 0659 | 91  | 50 |    |  |
| 5 569 | 40 | 9.600 4014 | 438 | 9.634 9584 | 664  | 0.365 1784 | 9.935 0665 | 91  | 40 |    |  |
| 6 569 | 50 | 9.600 4271 | 438 | 9.634 9601 | 665  | 0.365 1786 | 9.935 0671 | 91  | 30 |    |  |
| 7 569 | 60 | 9.600 4529 | 438 | 9.634 9619 | 666  | 0.365 1788 | 9.935 0677 | 91  | 20 |    |  |
| 8 569 | 70 | 9.600 4786 | 438 | 9.634 9636 | 667  | 0.365 1790 | 9.935 0683 | 91  | 10 |    |  |
| 9 569 | 80 | 9.600 5044 | 438 | 9.634 9654 | 668  | 0.365 1792 | 9.935 0689 | 91  | 0  | 25 |  |
| 1 568 | 0  | 9.600 5301 | 438 | 9.634 9671 | 669  | 0.365 1794 | 9.935 0695 | 91  | 50 |    |  |
| 2 568 | 10 | 9.600 5559 | 438 | 9.634 9689 | 670  | 0.365 1796 | 9.935 0701 | 91  | 40 |    |  |
| 3 568 | 20 | 9.600 5816 | 438 | 9.634 9706 | 671  | 0.365 1798 | 9.935 0707 | 91  | 30 |    |  |
| 4 568 | 30 | 9.600 6074 | 438 | 9.634 9724 | 672  | 0.365 1800 | 9.935 0713 | 91  | 20 |    |  |
| 5 568 | 40 | 9.600 6331 | 438 | 9.634 9741 | 673  | 0.365 1802 | 9.935 0719 | 91  | 10 |    |  |
| 6 568 | 50 | 9.600 6589 | 438 | 9.634 9759 | 674  | 0.365 1804 | 9.935 0725 | 91  | 0  | 24 |  |
| 7 568 | 60 | 9.600 6846 | 438 | 9.634 9776 | 675  | 0.365 1806 | 9.935 0731 | 91  | 50 |    |  |
| 8 568 | 70 | 9.600 7104 | 438 | 9.634 9794 | 676  | 0.365 1808 | 9.935 0737 | 91  | 40 |    |  |
| 9 568 | 80 | 9.600 7361 | 438 | 9.634 9811 | 677  | 0.365 1810 | 9.935 0743 | 91  | 30 |    |  |
| 1 567 | 0  | 9.600 7619 | 438 | 9.634 9829 | 678  | 0.365 1812 | 9.935 0749 | 91  |    |    |  |



|    | "  | Sin        | d.   | Tang       | d. c. | Cotg       | Cos        | d. | "  |         |
|----|----|------------|------|------------|-------|------------|------------|----|----|---------|
| 30 | 0  | 9.600 6997 | -484 | 9.638 3019 | 576   | 0.361 6081 | 9.962 3978 | 92 | 0  | 30      |
|    | 10 | 9.600 7481 | -484 | 9.638 3595 | 575   | 0.361 6405 | 9.962 3886 | 91 | 50 | 574     |
|    | 20 | 9.600 7965 | -484 | 9.638 4170 | 576   | 0.361 5830 | 9.962 3795 | 92 | 40 | 1 57.4  |
|    | 30 | 9.600 8449 | -484 | 9.638 4746 | 576   | 0.361 5254 | 9.962 3703 | 91 | 30 | 2 114.8 |
|    | 40 | 9.600 8933 | -484 | 9.638 5322 | 575   | 0.361 4678 | 9.962 3612 | 92 | 20 | 3 172.2 |
|    | 50 | 9.600 9417 | -484 | 9.638 5897 | 576   | 0.361 4103 | 9.962 3520 | 92 | 10 | 4 220.6 |
| 31 | 0  | 9.600 9901 | -484 | 9.638 6473 | 575   | 0.361 3527 | 9.962 3428 | 91 | 0  | 5 287.0 |
|    | 10 | 9.601 0385 | -484 | 9.638 7048 | 576   | 0.361 2952 | 9.962 3337 | 92 | 50 | 6 344.4 |
|    | 20 | 9.601 0869 | -484 | 9.638 7624 | 575   | 0.361 2376 | 9.962 3245 | 92 | 40 | 7 401.8 |
|    | 30 | 9.601 1352 | -484 | 9.638 8199 | 575   | 0.361 1801 | 9.962 3153 | 91 | 30 | 8 459.2 |
|    | 40 | 9.601 1836 | -484 | 9.638 8774 | 575   | 0.361 1226 | 9.962 3062 | 92 | 20 | 9 516.6 |
|    | 50 | 9.601 2320 | -484 | 9.638 9349 | 576   | 0.361 0651 | 9.962 2970 | 92 | 10 |         |
| 32 | 0  | 9.601 2803 | -483 | 9.638 9925 | 575   | 0.361 0075 | 9.962 2878 | 91 | 0  | 28      |
|    | 10 | 9.601 3286 | -484 | 9.639 0500 | 575   | 0.360 9500 | 9.962 2787 | 92 | 50 | 1 57.3  |
|    | 20 | 9.601 3770 | -483 | 9.639 1075 | 575   | 0.360 8925 | 9.962 2695 | 92 | 40 | 2 124.6 |
|    | 30 | 9.601 4253 | -483 | 9.639 1650 | 575   | 0.360 8350 | 9.962 2603 | 92 | 30 | 3 171.9 |
|    | 40 | 9.601 4736 | -484 | 9.639 2225 | 575   | 0.360 7775 | 9.962 2511 | 91 | 20 | 4 220.2 |
|    | 50 | 9.601 5220 | -483 | 9.639 2800 | 575   | 0.360 7200 | 9.962 2420 | 92 | 10 | 5 286.5 |
| 33 | 0  | 9.601 5703 | -483 | 9.639 3375 | 575   | 0.360 6625 | 9.962 2328 | 92 | 0  | 6 343.8 |
|    | 10 | 9.601 6186 | -483 | 9.639 3950 | 574   | 0.360 6050 | 9.962 2236 | 92 | 50 | 7 401.1 |
|    | 20 | 9.601 6669 | -483 | 9.639 4524 | 575   | 0.360 5476 | 9.962 2144 | 91 | 40 | 8 458.4 |
|    | 30 | 9.601 7152 | -483 | 9.639 5099 | 575   | 0.360 4901 | 9.962 2053 | 92 | 30 | 9 515.7 |
|    | 40 | 9.601 7635 | -482 | 9.639 5674 | 574   | 0.360 4326 | 9.962 1961 | 92 | 20 |         |
|    | 50 | 9.601 8117 | -483 | 9.639 6248 | 575   | 0.360 3752 | 9.962 1869 | 92 | 10 | 485     |
| 34 | 0  | 9.601 8600 | -483 | 9.639 6823 | 574   | 0.360 3177 | 9.962 1777 | 92 | 0  | 1 48.5  |
|    | 10 | 9.601 9083 | -482 | 9.639 7397 | 575   | 0.360 2603 | 9.962 1685 | 92 | 50 | 2 97.0  |
|    | 20 | 9.601 9565 | -483 | 9.639 7972 | 574   | 0.360 2028 | 9.962 1593 | 91 | 40 | 3 145.5 |
|    | 30 | 9.602 0048 | -482 | 9.639 8546 | 575   | 0.360 1454 | 9.962 1502 | 92 | 30 | 4 194.0 |
|    | 40 | 9.602 0530 | -483 | 9.639 9121 | 574   | 0.360 0879 | 9.962 1410 | 92 | 20 | 5 242.5 |
|    | 50 | 9.602 1013 | -482 | 9.639 9695 | 574   | 0.360 0305 | 9.962 1318 | 92 | 10 | 6 290.9 |
| 35 | 0  | 9.602 1495 | -482 | 9.640 0269 | 574   | 0.359 9731 | 9.962 1226 | 92 | 0  | 7 339.5 |
|    | 10 | 9.602 1977 | -483 | 9.640 0843 | 575   | 0.359 9157 | 9.962 1134 | 92 | 50 | 8 388.0 |
|    | 20 | 9.602 2460 | -482 | 9.640 1418 | 574   | 0.359 8582 | 9.962 1042 | 92 | 40 | 9 436.5 |
|    | 30 | 9.602 2942 | -482 | 9.640 1992 | 574   | 0.359 8008 | 9.962 0950 | 92 | 30 | 1 48.3  |
|    | 40 | 9.602 3424 | -482 | 9.640 2566 | 574   | 0.359 7434 | 9.962 0858 | 92 | 20 | 2 96.6  |
|    | 50 | 9.602 3906 | -482 | 9.640 3140 | 574   | 0.359 6860 | 9.962 0766 | 92 | 10 | 3 144.9 |
| 36 | 0  | 9.602 4388 | -482 | 9.640 3714 | 574   | 0.359 6286 | 9.962 0674 | 92 | 0  | 4 193.4 |
|    | 10 | 9.602 4870 | -482 | 9.640 4288 | 574   | 0.359 5712 | 9.962 0582 | 92 | 50 | 5 241.5 |
|    | 20 | 9.602 5352 | -481 | 9.640 4861 | 573   | 0.359 5139 | 9.962 0490 | 92 | 40 | 6 289.8 |
|    | 30 | 9.602 5833 | -482 | 9.640 5435 | 574   | 0.359 4565 | 9.962 0398 | 92 | 30 | 7 338.1 |
|    | 40 | 9.602 6315 | -482 | 9.640 6009 | 574   | 0.359 3991 | 9.962 0306 | 92 | 20 | 8 386.4 |
|    | 50 | 9.602 6797 | -481 | 9.640 6583 | 573   | 0.359 3417 | 9.962 0214 | 92 | 10 | 9 434.7 |
| 37 | 0  | 9.602 7278 | -482 | 9.640 7156 | 574   | 0.359 2844 | 9.962 0122 | 92 | 0  | 481     |
|    | 10 | 9.602 7760 | -481 | 9.640 7730 | 573   | 0.359 2270 | 9.962 0030 | 92 | 50 | 1 48.1  |
|    | 20 | 9.602 8241 | -482 | 9.640 8303 | 574   | 0.359 1697 | 9.961 9938 | 92 | 40 | 2 96.2  |
|    | 30 | 9.602 8723 | -481 | 9.640 8877 | 573   | 0.359 1123 | 9.961 9846 | 92 | 30 | 3 144.1 |
|    | 40 | 9.602 9204 | -481 | 9.640 9450 | 574   | 0.359 0550 | 9.961 9754 | 92 | 20 | 4 192.4 |
|    | 50 | 9.602 9685 | -481 | 9.641 0024 | 573   | 0.358 9976 | 9.961 9662 | 92 | 10 | 5 240.5 |
| 38 | 0  | 9.603 0166 | -482 | 9.641 0597 | 573   | 0.358 9403 | 9.961 9569 | 92 | 0  | 6 288.6 |
|    | 10 | 9.603 0648 | -481 | 9.641 1170 | 574   | 0.358 8830 | 9.961 9477 | 92 | 50 | 7 336.7 |
|    | 20 | 9.603 1129 | -481 | 9.641 1744 | 573   | 0.358 8256 | 9.961 9385 | 92 | 40 | 8 384.8 |
|    | 30 | 9.603 1610 | -481 | 9.641 2317 | 573   | 0.358 7683 | 9.961 9293 | 92 | 30 | 9 432.9 |
|    | 40 | 9.603 2091 | -481 | 9.641 2890 | 573   | 0.358 7110 | 9.961 9201 | 92 | 20 |         |
|    | 50 | 9.603 2572 | -480 | 9.641 3463 | 573   | 0.358 6537 | 9.961 9109 | 93 | 10 | 92      |
| 39 | 0  | 9.603 3053 | -481 | 9.641 4036 | 573   | 0.358 5964 | 9.961 9016 | 92 | 0  | 1 9.2   |
|    | 10 | 9.603 3533 | -481 | 9.641 4609 | 573   | 0.358 5391 | 9.961 8924 | 92 | 50 | 2 18.4  |
|    | 20 | 9.603 4014 | -480 | 9.641 5182 | 573   | 0.358 4818 | 9.961 8832 | 92 | 40 | 3 27.6  |
|    | 30 | 9.603 4494 | -481 | 9.641 5755 | 573   | 0.358 4245 | 9.961 8740 | 93 | 30 | 4 36.8  |
|    | 40 | 9.603 4975 | -481 | 9.641 6328 | 572   | 0.358 3672 | 9.961 8647 | 92 | 20 | 5 46.0  |
|    | 50 | 9.603 5456 | -480 | 9.641 6900 | 573   | 0.358 3100 | 9.961 8555 | 92 | 10 | 6 55.2  |
| 40 | 0  | 9.603 5936 | -480 | 9.641 7473 | 573   | 0.358 2527 | 9.961 8463 | 92 | 0  | 7 64.4  |
|    |    |            |      |            |       |            |            |    |    | 8 73.6  |
|    |    |            |      |            |       |            |            |    |    | 9 82.8  |
|    | "  | Cos        | d.   | Cotg       | d. c. | Tang       | Sin        | d. | "  |         |



|         |    | Sin        | d.  | Tang       | d. c. | Cotg       | Con        | d. |    |    |
|---------|----|------------|-----|------------|-------|------------|------------|----|----|----|
| 572     | 0  | 9.603 5936 | 480 | 9.641 7471 | 573   | 0.158 2557 | 9.961 8463 | 92 | 0  | 20 |
| 1 57.4  | 10 | 9.603 6416 | 481 | 9.641 8046 | 574   | 0.158 1951 | 9.961 8471 | 93 | 50 |    |
| 2 57.6  | 20 | 9.603 6897 | 480 | 9.641 8618 | 573   | 0.158 1382 | 9.961 8478 | 94 | 40 |    |
| 3 57.8  | 30 | 9.603 7377 | 480 | 9.641 9191 | 574   | 0.158 0809 | 9.961 8486 | 92 | 30 |    |
| 4 58.0  | 40 | 9.603 7857 | 480 | 9.641 9763 | 573   | 0.158 0247 | 9.961 8494 | 91 | 20 |    |
| 5 58.2  | 50 | 9.603 8337 | 480 | 9.642 0336 | 574   | 0.157 9681 | 9.961 8501 | 92 | 10 |    |
| 6 58.4  | 0  | 9.603 8817 | 480 | 9.642 0908 | 573   | 0.157 9112 | 9.961 7999 | 93 | 0  | 19 |
| 7 58.6  | 10 | 9.603 9297 | 480 | 9.642 1481 | 574   | 0.157 8549 | 9.961 7817 | 94 | 50 |    |
| 8 58.8  | 20 | 9.603 9777 | 480 | 9.642 2053 | 573   | 0.157 7977 | 9.961 7724 | 92 | 40 |    |
| 9 59.0  | 30 | 9.604 0257 | 480 | 9.642 2625 | 574   | 0.157 7405 | 9.961 7642 | 93 | 30 |    |
| 10 59.2 | 40 | 9.604 0737 | 480 | 9.642 3197 | 573   | 0.157 6834 | 9.961 7559 | 94 | 20 |    |
| 11 59.4 | 50 | 9.604 1217 | 479 | 9.642 3769 | 574   | 0.157 6261 | 9.961 7477 | 92 | 10 |    |
| 12 59.6 | 0  | 9.604 1697 | 480 | 9.642 4341 | 573   | 0.157 5688 | 9.961 7395 | 93 | 0  | 18 |
| 13 59.8 | 10 | 9.604 2176 | 479 | 9.642 4913 | 574   | 0.157 5116 | 9.961 7302 | 94 | 50 |    |
| 14 60.0 | 20 | 9.604 2655 | 480 | 9.642 5486 | 573   | 0.157 4544 | 9.961 7210 | 92 | 40 |    |
| 15 60.2 | 30 | 9.604 3135 | 479 | 9.642 6058 | 574   | 0.157 3972 | 9.961 7117 | 93 | 30 |    |
| 16 60.4 | 40 | 9.604 3614 | 480 | 9.642 6629 | 573   | 0.157 3401 | 9.961 7025 | 94 | 20 |    |
| 17 60.6 | 50 | 9.604 4094 | 479 | 9.642 7201 | 574   | 0.157 2829 | 9.961 6932 | 92 | 10 |    |
| 18 60.8 | 0  | 9.604 4573 | 479 | 9.642 7773 | 573   | 0.157 2257 | 9.961 6840 | 93 | 0  | 17 |
| 19 61.0 | 10 | 9.604 5052 | 479 | 9.642 8345 | 574   | 0.157 1685 | 9.961 6747 | 94 | 50 |    |
| 20 61.2 | 20 | 9.604 5531 | 480 | 9.642 8917 | 573   | 0.157 1113 | 9.961 6655 | 92 | 40 |    |
| 21 61.4 | 30 | 9.604 6011 | 479 | 9.642 9489 | 574   | 0.157 0541 | 9.961 6562 | 93 | 30 |    |
| 22 61.6 | 40 | 9.604 6490 | 479 | 9.643 0061 | 573   | 0.156 9969 | 9.961 6470 | 94 | 20 |    |
| 23 61.8 | 50 | 9.604 6969 | 479 | 9.643 0633 | 574   | 0.156 9397 | 9.961 6377 | 92 | 10 |    |
| 24 62.0 | 0  | 9.604 7448 | 478 | 9.643 1205 | 573   | 0.156 8825 | 9.961 6285 | 93 | 0  | 16 |
| 25 62.2 | 10 | 9.604 7926 | 479 | 9.643 1777 | 574   | 0.156 8253 | 9.961 6192 | 94 | 50 |    |
| 26 62.4 | 20 | 9.604 8405 | 479 | 9.643 2349 | 573   | 0.156 7681 | 9.961 6100 | 92 | 40 |    |
| 27 62.6 | 30 | 9.604 8884 | 479 | 9.643 2921 | 574   | 0.156 7109 | 9.961 5997 | 93 | 30 |    |
| 28 62.8 | 40 | 9.604 9363 | 478 | 9.643 3493 | 573   | 0.156 6537 | 9.961 5894 | 94 | 20 |    |
| 29 63.0 | 50 | 9.604 9841 | 479 | 9.643 4065 | 574   | 0.156 5965 | 9.961 5792 | 92 | 10 |    |
| 30 63.2 | 0  | 9.605 0320 | 478 | 9.643 4637 | 573   | 0.156 5393 | 9.961 5699 | 93 | 0  | 15 |
| 31 63.4 | 10 | 9.605 0798 | 479 | 9.643 5209 | 574   | 0.156 4821 | 9.961 5606 | 94 | 50 |    |
| 32 63.6 | 20 | 9.605 1277 | 478 | 9.643 5781 | 573   | 0.156 4249 | 9.961 5514 | 92 | 40 |    |
| 33 63.8 | 30 | 9.605 1755 | 478 | 9.643 6353 | 574   | 0.156 3677 | 9.961 5421 | 93 | 30 |    |
| 34 64.0 | 40 | 9.605 2233 | 479 | 9.643 6925 | 573   | 0.156 3105 | 9.961 5329 | 94 | 20 |    |
| 35 64.2 | 50 | 9.605 2712 | 478 | 9.643 7497 | 574   | 0.156 2533 | 9.961 5236 | 92 | 10 |    |
| 36 64.4 | 0  | 9.605 3190 | 478 | 9.643 8069 | 573   | 0.156 1961 | 9.961 5144 | 93 | 0  | 14 |
| 37 64.6 | 10 | 9.605 3668 | 478 | 9.643 8641 | 574   | 0.156 1389 | 9.961 5051 | 94 | 50 |    |
| 38 64.8 | 20 | 9.605 4146 | 478 | 9.643 9213 | 573   | 0.156 0817 | 9.961 4959 | 92 | 40 |    |
| 39 65.0 | 30 | 9.605 4624 | 478 | 9.643 9785 | 574   | 0.156 0245 | 9.961 4866 | 93 | 30 |    |
| 40 65.2 | 40 | 9.605 5102 | 478 | 9.644 0357 | 573   | 0.155 9673 | 9.961 4774 | 94 | 20 |    |
| 41 65.4 | 50 | 9.605 5580 | 477 | 9.644 0929 | 574   | 0.155 9101 | 9.961 4681 | 92 | 10 |    |
| 42 65.6 | 0  | 9.605 6057 | 478 | 9.644 1501 | 573   | 0.155 8529 | 9.961 4589 | 93 | 0  | 13 |
| 43 65.8 | 10 | 9.605 6535 | 478 | 9.644 2073 | 574   | 0.155 7957 | 9.961 4496 | 94 | 50 |    |
| 44 66.0 | 20 | 9.605 7013 | 477 | 9.644 2645 | 573   | 0.155 7385 | 9.961 4404 | 92 | 40 |    |
| 45 66.2 | 30 | 9.605 7490 | 478 | 9.644 3217 | 574   | 0.155 6813 | 9.961 4311 | 93 | 30 |    |
| 46 66.4 | 40 | 9.605 7968 | 478 | 9.644 3789 | 573   | 0.155 6241 | 9.961 4219 | 94 | 20 |    |
| 47 66.6 | 50 | 9.605 8445 | 477 | 9.644 4361 | 574   | 0.155 5669 | 9.961 4126 | 92 | 10 |    |
| 48 66.8 | 0  | 9.605 8923 | 477 | 9.644 4933 | 573   | 0.155 5097 | 9.961 4034 | 93 | 0  | 12 |
| 49 67.0 | 10 | 9.605 9401 | 478 | 9.644 5505 | 574   | 0.155 4525 | 9.961 3941 | 94 | 50 |    |
| 50 67.2 | 20 | 9.605 9878 | 477 | 9.644 6077 | 573   | 0.155 3953 | 9.961 3849 | 92 | 40 |    |
| 51 67.4 | 30 | 9.606 0355 | 477 | 9.644 6649 | 574   | 0.155 3381 | 9.961 3756 | 93 | 30 |    |
| 52 67.6 | 40 | 9.606 0833 | 477 | 9.644 7221 | 573   | 0.155 2809 | 9.961 3664 | 94 | 20 |    |
| 53 67.8 | 50 | 9.606 1309 | 477 | 9.644 7793 | 574   | 0.155 2237 | 9.961 3571 | 92 | 10 |    |
| 54 68.0 | 0  | 9.606 1786 | 477 | 9.644 8365 | 573   | 0.155 1665 | 9.961 3479 | 93 | 0  | 11 |
| 55 68.2 | 10 | 9.606 2263 | 477 | 9.644 8937 | 574   | 0.155 1093 | 9.961 3386 | 94 | 50 |    |
| 56 68.4 | 20 | 9.606 2740 | 477 | 9.644 9509 | 573   | 0.155 0521 | 9.961 3294 | 92 | 40 |    |
| 57 68.6 | 30 | 9.606 3217 | 477 | 9.645 0081 | 574   | 0.154 9949 | 9.961 3201 | 93 | 30 |    |
| 58 68.8 | 40 | 9.606 3694 | 476 | 9.645 0653 | 573   | 0.154 9377 | 9.961 3109 | 94 | 20 |    |
| 59 69.0 | 50 | 9.606 4170 | 477 | 9.645 1225 | 574   | 0.154 8805 | 9.961 3016 | 92 | 10 |    |
| 60 69.2 | 0  | 9.606 4647 | 477 | 9.645 1797 | 573   | 0.154 8137 | 9.961 2924 | 93 | 0  | 10 |
|         |    |            |     |            |       |            |            |    |    |    |
|         |    | Con        | d.  | Cotg       | d. c. | Tang       | Sin        | d. |    |    |



|    | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d. | "  |    |
|----|----|------------|-----|------------|-------|------------|------------|----|----|----|
| 50 | 0  | 9.606 4647 | 477 | 9.645 1743 | 569   | 0.354 8257 | 9.961 2904 | 93 | 0  | 10 |
|    | 10 | 9.606 5124 | 476 | 9.645 2312 | 570   | 0.354 7688 | 9.961 2811 | 93 | 50 |    |
|    | 20 | 9.606 5600 | 477 | 9.645 2882 | 569   | 0.354 7118 | 9.961 2718 | 93 | 40 |    |
|    | 30 | 9.606 6077 | 476 | 9.645 3451 | 570   | 0.354 6549 | 9.961 2625 | 93 | 30 |    |
|    | 40 | 9.606 6553 | 476 | 9.645 4021 | 569   | 0.354 5979 | 9.961 2532 | 93 | 20 |    |
|    | 50 | 9.606 7029 | 477 | 9.645 4590 | 570   | 0.354 5410 | 9.961 2439 | 93 | 10 |    |
| 51 | 0  | 9.606 7506 | 476 | 9.645 5160 | 569   | 0.354 4840 | 9.961 2346 | 93 | 0  | 9  |
|    | 10 | 9.606 7982 | 476 | 9.645 5729 | 569   | 0.354 4271 | 9.961 2253 | 93 | 50 |    |
|    | 20 | 9.606 8458 | 476 | 9.645 6298 | 570   | 0.354 3702 | 9.961 2160 | 93 | 40 |    |
|    | 30 | 9.606 8934 | 476 | 9.645 6868 | 569   | 0.354 3132 | 9.961 2067 | 93 | 30 |    |
|    | 40 | 9.606 9410 | 476 | 9.645 7437 | 569   | 0.354 2563 | 9.961 1974 | 94 | 20 |    |
|    | 50 | 9.606 9886 | 476 | 9.645 8006 | 569   | 0.354 1994 | 9.961 1880 | 93 | 10 |    |
| 52 | 0  | 9.607 0362 | 476 | 9.645 8575 | 569   | 0.354 1425 | 9.961 1787 | 93 | 0  | 8  |
|    | 10 | 9.607 0838 | 476 | 9.645 9144 | 569   | 0.354 0856 | 9.961 1694 | 93 | 50 |    |
|    | 20 | 9.607 1314 | 475 | 9.645 9713 | 569   | 0.354 0287 | 9.961 1601 | 93 | 40 |    |
|    | 30 | 9.607 1789 | 476 | 9.646 0282 | 569   | 0.353 9718 | 9.961 1508 | 93 | 30 |    |
|    | 40 | 9.607 2265 | 476 | 9.646 0851 | 568   | 0.353 9149 | 9.961 1415 | 94 | 20 |    |
|    | 50 | 9.607 2741 | 475 | 9.646 1419 | 569   | 0.353 8581 | 9.961 1321 | 93 | 10 |    |
| 53 | 0  | 9.607 3216 | 476 | 9.646 1988 | 569   | 0.353 8012 | 9.961 1228 | 93 | 0  | 7  |
|    | 10 | 9.607 3692 | 475 | 9.646 2557 | 569   | 0.353 7443 | 9.961 1135 | 93 | 50 |    |
|    | 20 | 9.607 4167 | 476 | 9.646 3126 | 568   | 0.353 6874 | 9.961 1042 | 94 | 40 |    |
|    | 30 | 9.607 4643 | 475 | 9.646 3694 | 569   | 0.353 6306 | 9.961 0948 | 93 | 30 |    |
|    | 40 | 9.607 5118 | 475 | 9.646 4263 | 568   | 0.353 5737 | 9.961 0855 | 93 | 20 |    |
|    | 50 | 9.607 5593 | 475 | 9.646 4831 | 569   | 0.353 5169 | 9.961 0762 | 94 | 10 |    |
| 54 | 0  | 9.607 6068 | 475 | 9.646 5400 | 568   | 0.353 4600 | 9.961 0668 | 93 | 0  | 6  |
|    | 10 | 9.607 6543 | 475 | 9.646 5968 | 569   | 0.353 4032 | 9.961 0575 | 93 | 50 |    |
|    | 20 | 9.607 7018 | 475 | 9.646 6537 | 568   | 0.353 3463 | 9.961 0482 | 93 | 40 |    |
|    | 30 | 9.607 7493 | 475 | 9.646 7105 | 568   | 0.353 2895 | 9.961 0389 | 94 | 30 |    |
|    | 40 | 9.607 7968 | 475 | 9.646 7673 | 568   | 0.353 2327 | 9.961 0295 | 93 | 20 |    |
|    | 50 | 9.607 8443 | 475 | 9.646 8241 | 569   | 0.353 1759 | 9.961 0202 | 94 | 10 |    |
| 55 | 0  | 9.607 8918 | 475 | 9.646 8810 | 568   | 0.353 1190 | 9.961 0108 | 93 | 0  | 5  |
|    | 10 | 9.607 9393 | 474 | 9.646 9378 | 568   | 0.353 0622 | 9.961 0015 | 93 | 50 |    |
|    | 20 | 9.607 9867 | 475 | 9.646 9946 | 568   | 0.353 0054 | 9.960 9922 | 94 | 40 |    |
|    | 30 | 9.608 0342 | 475 | 9.647 0514 | 568   | 0.352 9486 | 9.960 9828 | 93 | 30 |    |
|    | 40 | 9.608 0817 | 474 | 9.647 1082 | 568   | 0.352 8918 | 9.960 9735 | 94 | 20 |    |
|    | 50 | 9.608 1291 | 474 | 9.647 1650 | 567   | 0.352 8350 | 9.960 9641 | 93 | 10 |    |
| 56 | 0  | 9.608 1765 | 475 | 9.647 2217 | 568   | 0.352 7783 | 9.960 9548 | 94 | 0  | 4  |
|    | 10 | 9.608 2240 | 474 | 9.647 2785 | 568   | 0.352 7215 | 9.960 9454 | 93 | 50 |    |
|    | 20 | 9.608 2714 | 474 | 9.647 3353 | 568   | 0.352 6647 | 9.960 9361 | 93 | 40 |    |
|    | 30 | 9.608 3188 | 474 | 9.647 3921 | 567   | 0.352 6079 | 9.960 9268 | 94 | 30 |    |
|    | 40 | 9.608 3662 | 475 | 9.647 4488 | 568   | 0.352 5512 | 9.960 9174 | 93 | 20 |    |
|    | 50 | 9.608 4137 | 475 | 9.647 5056 | 568   | 0.352 4944 | 9.960 9081 | 94 | 10 |    |
| 57 | 0  | 9.608 4611 | 474 | 9.647 5624 | 567   | 0.352 4376 | 9.960 8987 | 93 | 0  | 3  |
|    | 10 | 9.608 5085 | 474 | 9.647 6191 | 568   | 0.352 3809 | 9.960 8894 | 94 | 50 |    |
|    | 20 | 9.608 5559 | 473 | 9.647 6759 | 567   | 0.352 3241 | 9.960 8800 | 94 | 40 |    |
|    | 30 | 9.608 6032 | 474 | 9.647 7326 | 567   | 0.352 2674 | 9.960 8706 | 93 | 30 |    |
|    | 40 | 9.608 6506 | 474 | 9.647 7893 | 568   | 0.352 2107 | 9.960 8613 | 94 | 20 |    |
|    | 50 | 9.608 6980 | 474 | 9.647 8461 | 567   | 0.352 1539 | 9.960 8519 | 93 | 10 |    |
| 58 | 0  | 9.608 7454 | 473 | 9.647 9028 | 567   | 0.352 0972 | 9.960 8426 | 94 | 0  | 2  |
|    | 10 | 9.608 7927 | 474 | 9.647 9595 | 567   | 0.352 0405 | 9.960 8332 | 94 | 50 |    |
|    | 20 | 9.608 8401 | 473 | 9.648 0162 | 568   | 0.351 9838 | 9.960 8238 | 93 | 40 |    |
|    | 30 | 9.608 8874 | 474 | 9.648 0730 | 567   | 0.351 9270 | 9.960 8145 | 94 | 30 |    |
|    | 40 | 9.608 9348 | 473 | 9.648 1297 | 567   | 0.351 8703 | 9.960 8051 | 93 | 20 |    |
|    | 50 | 9.608 9821 | 473 | 9.648 1864 | 567   | 0.351 8136 | 9.960 7958 | 93 | 10 |    |
| 59 | 0  | 9.609 0294 | 474 | 9.648 2431 | 566   | 0.351 7569 | 9.960 7864 | 94 | 0  | 1  |
|    | 10 | 9.609 0768 | 473 | 9.648 2997 | 567   | 0.351 7003 | 9.960 7770 | 93 | 50 |    |
|    | 20 | 9.609 1241 | 473 | 9.648 3564 | 567   | 0.351 6436 | 9.960 7677 | 94 | 40 |    |
|    | 30 | 9.609 1714 | 473 | 9.648 4131 | 567   | 0.351 5869 | 9.960 7583 | 93 | 30 |    |
|    | 40 | 9.609 2187 | 473 | 9.648 4698 | 567   | 0.351 5302 | 9.960 7489 | 94 | 20 |    |
|    | 50 | 9.609 2660 | 473 | 9.648 5265 | 566   | 0.351 4735 | 9.960 7395 | 93 | 10 |    |
| 60 | 0  | 9.609 3133 | 473 | 9.648 5831 | 566   | 0.351 4169 | 9.960 7302 | 93 | 0  | 0  |
|    | "  | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d. | "  |    |

569

1 56.9

2 113.8

3 170.7

4 227.6

5 284.5

6 341.4

7 398.3

8 455.2

9 512.1

568

1 56.8

2 113.6

3 170.4

4 227.2

5 284.0

6 340.8

7 397.6

8 454.4

9 511.2

567

1 56.7

2 113.4

3 170.1

4 226.8

5 283.5

6 340.2

7 396.9

8 453.6

9 510.3

475

1 47.5

2 95.0

3 142.5

4 190.0

5 237.5

6 285.0

7 332.5

8 380.0

9 427.5

474

1 47.4

2 94.8

3 142.1

4 189.6

5 237.0

6 284.4

7 331.8

8 379.2

9 426.6

04

1 9.4

2 18.8

3 28.2

4 37.6

5 47.0

6 56.4

7 65.8

8 75.2

9 84.6







|    | "  | Sin        | d.  | Tang       | d. c. | Colg       | Coa        | d. | "  |    |
|----|----|------------|-----|------------|-------|------------|------------|----|----|----|
| 10 | 0  | 9.612 1397 | 469 | 9.651 9742 | 564   | 0.348 0258 | 9.960 1655 | 95 | 0  | 50 |
|    | 10 | 9.612 1866 | 469 | 9.652 0366 | 563   | 0.347 9694 | 9.960 1560 | 94 | 50 |    |
|    | 20 | 9.612 2335 | 469 | 9.652 0869 | 564   | 0.347 9131 | 9.960 1466 | 95 | 40 |    |
|    | 30 | 9.612 2804 | 469 | 9.652 1433 | 563   | 0.347 8567 | 9.960 1371 | 94 | 30 |    |
|    | 40 | 9.612 3273 | 469 | 9.652 1996 | 564   | 0.347 8004 | 9.960 1277 | 95 | 20 |    |
|    | 50 | 9.612 3742 | 469 | 9.652 2560 | 563   | 0.347 7440 | 9.960 1182 | 94 | 10 |    |
| 11 | 0  | 9.612 4211 | 469 | 9.652 3123 | 564   | 0.347 6877 | 9.960 1088 | 95 | 0  | 49 |
|    | 10 | 9.612 4680 | 469 | 9.652 3687 | 563   | 0.347 6313 | 9.960 0993 | 94 | 50 |    |
|    | 20 | 9.612 5149 | 468 | 9.652 4250 | 563   | 0.347 5750 | 9.960 0899 | 95 | 40 |    |
|    | 30 | 9.612 5617 | 469 | 9.652 4813 | 564   | 0.347 5187 | 9.960 0804 | 94 | 30 |    |
|    | 40 | 9.612 6086 | 469 | 9.652 5377 | 563   | 0.347 4623 | 9.960 0710 | 95 | 20 |    |
|    | 50 | 9.612 6555 | 468 | 9.652 5940 | 563   | 0.347 4060 | 9.960 0615 | 94 | 10 |    |
| 12 | 0  | 9.612 7023 | 469 | 9.652 6503 | 563   | 0.347 3497 | 9.960 0520 | 95 | 0  | 48 |
|    | 10 | 9.612 7492 | 468 | 9.652 7066 | 563   | 0.347 2934 | 9.960 0426 | 94 | 50 |    |
|    | 20 | 9.612 7960 | 468 | 9.652 7629 | 563   | 0.347 2371 | 9.960 0331 | 95 | 40 |    |
|    | 30 | 9.612 8428 | 469 | 9.652 8192 | 563   | 0.347 1808 | 9.960 0236 | 94 | 30 |    |
|    | 40 | 9.612 8897 | 468 | 9.652 8755 | 563   | 0.347 1245 | 9.960 0142 | 95 | 20 |    |
|    | 50 | 9.612 9365 | 468 | 9.652 9318 | 563   | 0.347 0682 | 9.960 0047 | 94 | 10 |    |
| 13 | 0  | 9.612 9833 | 468 | 9.652 9881 | 563   | 0.347 0119 | 9.959 9952 | 95 | 0  | 47 |
|    | 10 | 9.613 0301 | 468 | 9.653 0444 | 562   | 0.346 9556 | 9.959 9858 | 94 | 50 |    |
|    | 20 | 9.613 0769 | 468 | 9.653 1006 | 563   | 0.346 8994 | 9.959 9763 | 95 | 40 |    |
|    | 30 | 9.613 1237 | 468 | 9.653 1569 | 563   | 0.346 8431 | 9.959 9668 | 94 | 30 |    |
|    | 40 | 9.613 1705 | 468 | 9.653 2132 | 562   | 0.346 7868 | 9.959 9573 | 95 | 20 |    |
|    | 50 | 9.613 2173 | 468 | 9.653 2694 | 563   | 0.346 7306 | 9.959 9479 | 94 | 10 |    |
| 14 | 0  | 9.613 2641 | 468 | 9.653 3257 | 562   | 0.346 6743 | 9.959 9384 | 95 | 0  | 46 |
|    | 10 | 9.613 3109 | 467 | 9.653 3819 | 563   | 0.346 6181 | 9.959 9289 | 94 | 50 |    |
|    | 20 | 9.613 3576 | 468 | 9.653 4382 | 562   | 0.346 5618 | 9.959 9194 | 95 | 40 |    |
|    | 30 | 9.613 4044 | 467 | 9.653 4944 | 563   | 0.346 5056 | 9.959 9100 | 94 | 30 |    |
|    | 40 | 9.613 4511 | 468 | 9.653 5507 | 562   | 0.346 4493 | 9.959 9005 | 95 | 20 |    |
|    | 50 | 9.613 4979 | 467 | 9.653 6069 | 562   | 0.346 3931 | 9.959 8910 | 94 | 10 |    |
| 15 | 0  | 9.613 5446 | 468 | 9.653 6631 | 563   | 0.346 3369 | 9.959 8815 | 95 | 0  | 45 |
|    | 10 | 9.613 5914 | 467 | 9.653 7194 | 562   | 0.346 2806 | 9.959 8720 | 94 | 50 |    |
|    | 20 | 9.613 6381 | 467 | 9.653 7756 | 562   | 0.346 2244 | 9.959 8625 | 95 | 40 |    |
|    | 30 | 9.613 6848 | 468 | 9.653 8318 | 562   | 0.346 1682 | 9.959 8530 | 94 | 30 |    |
|    | 40 | 9.613 7316 | 467 | 9.653 8880 | 562   | 0.346 1120 | 9.959 8436 | 95 | 20 |    |
|    | 50 | 9.613 7783 | 467 | 9.653 9442 | 562   | 0.346 0558 | 9.959 8341 | 94 | 10 |    |
| 16 | 0  | 9.613 8250 | 467 | 9.654 0004 | 562   | 0.345 9996 | 9.959 8246 | 95 | 0  | 44 |
|    | 10 | 9.613 8717 | 467 | 9.654 0566 | 562   | 0.345 9434 | 9.959 8151 | 94 | 50 |    |
|    | 20 | 9.613 9184 | 467 | 9.654 1128 | 562   | 0.345 8872 | 9.959 8056 | 95 | 40 |    |
|    | 30 | 9.613 9651 | 467 | 9.654 1690 | 561   | 0.345 8310 | 9.959 7961 | 94 | 30 |    |
|    | 40 | 9.614 0117 | 466 | 9.654 2251 | 562   | 0.345 7749 | 9.959 7866 | 95 | 20 |    |
|    | 50 | 9.614 0584 | 467 | 9.654 2813 | 562   | 0.345 7187 | 9.959 7771 | 94 | 10 |    |
| 17 | 0  | 9.614 1051 | 467 | 9.654 3375 | 562   | 0.345 6625 | 9.959 7676 | 95 | 0  | 43 |
|    | 10 | 9.614 1518 | 466 | 9.654 3937 | 561   | 0.345 6063 | 9.959 7581 | 94 | 50 |    |
|    | 20 | 9.614 1984 | 467 | 9.654 4498 | 562   | 0.345 5502 | 9.959 7486 | 95 | 40 |    |
|    | 30 | 9.614 2451 | 466 | 9.654 5060 | 561   | 0.345 4940 | 9.959 7391 | 94 | 30 |    |
|    | 40 | 9.614 2917 | 467 | 9.654 5621 | 562   | 0.345 4379 | 9.959 7296 | 95 | 20 |    |
|    | 50 | 9.614 3384 | 466 | 9.654 6183 | 561   | 0.345 3817 | 9.959 7201 | 94 | 10 |    |
| 18 | 0  | 9.614 3850 | 466 | 9.654 6744 | 561   | 0.345 3256 | 9.959 7106 | 95 | 0  | 42 |
|    | 10 | 9.614 4316 | 466 | 9.654 7305 | 562   | 0.345 2695 | 9.959 7011 | 94 | 50 |    |
|    | 20 | 9.614 4782 | 467 | 9.654 7867 | 561   | 0.345 2133 | 9.959 6916 | 95 | 40 |    |
|    | 30 | 9.614 5249 | 466 | 9.654 8428 | 561   | 0.345 1572 | 9.959 6821 | 94 | 30 |    |
|    | 40 | 9.614 5715 | 466 | 9.654 8989 | 561   | 0.345 1011 | 9.959 6725 | 95 | 20 |    |
|    | 50 | 9.614 6181 | 466 | 9.654 9550 | 562   | 0.345 0450 | 9.959 6630 | 94 | 10 |    |
| 19 | 0  | 9.614 6647 | 466 | 9.655 0112 | 561   | 0.344 9888 | 9.959 6535 | 95 | 0  | 41 |
|    | 10 | 9.614 7113 | 466 | 9.655 0673 | 561   | 0.344 9327 | 9.959 6440 | 94 | 50 |    |
|    | 20 | 9.614 7579 | 465 | 9.655 1234 | 561   | 0.344 8766 | 9.959 6345 | 95 | 40 |    |
|    | 30 | 9.614 8044 | 466 | 9.655 1795 | 561   | 0.344 8205 | 9.959 6250 | 94 | 30 |    |
|    | 40 | 9.614 8510 | 466 | 9.655 2356 | 560   | 0.344 7644 | 9.959 6155 | 95 | 20 |    |
|    | 50 | 9.614 8976 | 465 | 9.655 2916 | 561   | 0.344 7084 | 9.959 6059 | 94 | 10 |    |
| 20 | 0  | 9.614 9441 | 465 | 9.655 3477 |       | 0.344 6523 | 9.959 5964 | 95 | 0  | 40 |
|    |    |            |     |            |       |            |            |    |    |    |
|    | "  | Coa        | d.  | Colg       | d. c. | Tang       | Sin        | d. | "  |    |

563  
1 56.1  
2 112.2  
3 168.9  
4 225.2  
5 281.5  
6 337.8  
7 394.1  
8 450.4  
9 506.7

561  
1 56.1  
2 112.2  
3 168.3  
4 224.4  
5 280.5  
6 336.6  
7 392.7  
8 448.8  
9 504.9

469  
1 46.9  
2 93.8  
3 140.7  
4 187.6  
5 234.5  
6 281.4  
7 328.3  
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2 93.2  
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7 326.2  
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1 9.5  
2 19.0  
3 28.5  
4 38.0  
5 47.5  
6 57.0  
7 66.5  
8 76.0  
9 85.5



|         |    | Sin         | d.  | Tang       | d. c. | Cotg       | Cos        | d. |    |    |
|---------|----|-------------|-----|------------|-------|------------|------------|----|----|----|
| 561     | 20 | 0.9614 9441 | 466 | 9.655 3477 | 561   | 0.344 6523 | 9.959 5964 | 95 | 0  | 40 |
| 1 36.1  | 10 | 0.9614 9907 | 466 | 9.655 4038 | 561   | 0.344 5962 | 9.959 5869 | 95 | 50 |    |
| 2 112.1 | 20 | 0.9615 0373 | 465 | 9.655 4599 | 561   | 0.344 5401 | 9.959 5774 | 96 | 40 |    |
| 3 168.3 | 30 | 0.9615 0838 | 465 | 9.655 5160 | 561   | 0.344 4840 | 9.959 5678 | 96 | 30 |    |
| 4 224.4 | 40 | 0.9615 1303 | 465 | 9.655 5720 | 560   | 0.344 4280 | 9.959 5583 | 95 | 20 |    |
| 5 280.5 | 50 | 0.9615 1769 | 466 | 9.655 6281 | 561   | 0.344 3719 | 9.959 5488 | 95 | 10 |    |
| 6 336.6 |    |             | 465 |            | 560   |            |            | 95 | 0  | 39 |
| 7 392.7 | 21 | 0.9615 2234 | 465 | 9.655 6841 | 561   | 0.344 3159 | 9.959 5393 | 96 | 0  |    |
| 8 448.8 | 10 | 0.9615 2699 | 465 | 9.655 7402 | 560   | 0.344 2598 | 9.959 5297 | 95 | 50 |    |
| 9 504.9 | 20 | 0.9615 3164 | 465 | 9.655 7962 | 561   | 0.344 2038 | 9.959 5202 | 95 | 40 |    |
|         | 30 | 0.9615 3629 | 465 | 9.655 8523 | 561   | 0.344 1477 | 9.959 5107 | 95 | 30 |    |
|         | 40 | 0.9615 4094 | 465 | 9.655 9083 | 560   | 0.344 0917 | 9.959 5011 | 96 | 20 |    |
|         | 50 | 0.9615 4559 | 465 | 9.655 9643 | 560   | 0.344 0357 | 9.959 4916 | 95 | 10 |    |
| 559     | 22 | 0.9615 5024 | 465 | 9.656 0204 | 561   | 0.343 9796 | 9.959 4821 | 95 | 0  | 38 |
| 1 55.9  | 10 | 0.9615 5489 | 465 | 9.656 0764 | 560   | 0.343 9236 | 9.959 4725 | 96 | 50 |    |
| 2 111.8 | 20 | 0.9615 5954 | 465 | 9.656 1324 | 560   | 0.343 8676 | 9.959 4630 | 95 | 40 |    |
| 3 167.7 | 30 | 0.9615 6419 | 465 | 9.656 1884 | 560   | 0.343 8116 | 9.959 4535 | 95 | 30 |    |
| 4 223.6 | 40 | 0.9615 6883 | 464 | 9.656 2444 | 560   | 0.343 7556 | 9.959 4439 | 96 | 20 |    |
| 5 279.5 | 50 | 0.9615 7348 | 465 | 9.656 3004 | 560   | 0.343 6996 | 9.959 4344 | 96 | 10 |    |
| 6 335.4 | 23 | 0.9615 7812 | 465 | 9.656 3564 | 560   | 0.343 6436 | 9.959 4248 | 95 | 0  | 37 |
| 7 391.3 | 10 | 0.9615 8277 | 465 | 9.656 4124 | 560   | 0.343 5876 | 9.959 4153 | 96 | 50 |    |
| 8 447.2 | 20 | 0.9615 8741 | 465 | 9.656 4684 | 560   | 0.343 5316 | 9.959 4057 | 95 | 40 |    |
| 9 503.1 | 30 | 0.9615 9206 | 465 | 9.656 5244 | 560   | 0.343 4756 | 9.959 3962 | 95 | 30 |    |
|         | 40 | 0.9615 9670 | 464 | 9.656 5804 | 560   | 0.343 4196 | 9.959 3866 | 96 | 20 |    |
|         | 50 | 0.9616 0134 | 464 | 9.656 6363 | 559   | 0.343 3637 | 9.959 3771 | 96 | 10 |    |
| 558     | 24 | 0.9616 0599 | 464 | 9.656 6923 | 560   | 0.343 3077 | 9.959 3675 | 95 | 0  | 36 |
| 1 55.8  | 10 | 0.9616 1063 | 464 | 9.656 7483 | 560   | 0.343 2517 | 9.959 3580 | 96 | 50 |    |
| 2 111.6 | 20 | 0.9616 1527 | 464 | 9.656 8042 | 559   | 0.343 1958 | 9.959 3484 | 95 | 40 |    |
| 3 167.4 | 30 | 0.9616 1991 | 464 | 9.656 8602 | 560   | 0.343 1398 | 9.959 3389 | 95 | 30 |    |
| 4 223.2 | 40 | 0.9616 2455 | 464 | 9.656 9161 | 559   | 0.343 0839 | 9.959 3293 | 96 | 20 |    |
| 5 279.0 | 50 | 0.9616 2919 | 464 | 9.656 9721 | 560   | 0.343 0279 | 9.959 3198 | 95 | 10 |    |
| 6 334.8 | 25 | 0.9616 3382 | 464 | 9.657 0280 | 559   | 0.342 9720 | 9.959 3102 | 95 | 0  | 35 |
| 7 390.6 | 10 | 0.9616 3846 | 464 | 9.657 0840 | 560   | 0.342 9160 | 9.959 3007 | 96 | 50 |    |
| 8 446.4 | 20 | 0.9616 4310 | 464 | 9.657 1399 | 559   | 0.342 8601 | 9.959 2911 | 96 | 40 |    |
| 9 502.2 | 30 | 0.9616 4774 | 464 | 9.657 1958 | 559   | 0.342 8042 | 9.959 2815 | 95 | 30 |    |
|         | 40 | 0.9616 5237 | 464 | 9.657 2517 | 559   | 0.342 7483 | 9.959 2720 | 96 | 20 |    |
|         | 50 | 0.9616 5701 | 463 | 9.657 3077 | 560   | 0.342 6923 | 9.959 2624 | 96 | 10 |    |
| 465     | 26 | 0.9616 6164 | 464 | 9.657 3636 | 559   | 0.342 6364 | 9.959 2528 | 95 | 0  | 34 |
| 1 46.5  | 10 | 0.9616 6628 | 463 | 9.657 4195 | 559   | 0.342 5805 | 9.959 2433 | 96 | 50 |    |
| 2 93.0  | 20 | 0.9616 7091 | 463 | 9.657 4754 | 559   | 0.342 5246 | 9.959 2337 | 96 | 40 |    |
| 3 149.5 | 30 | 0.9616 7554 | 463 | 9.657 5313 | 559   | 0.342 4687 | 9.959 2241 | 95 | 30 |    |
| 4 206.0 | 40 | 0.9616 8017 | 464 | 9.657 5872 | 559   | 0.342 4128 | 9.959 2146 | 95 | 20 |    |
| 5 262.5 | 50 | 0.9616 8481 | 463 | 9.657 6431 | 559   | 0.342 3569 | 9.959 2050 | 96 | 10 |    |
| 6 319.0 | 27 | 0.9616 8944 | 463 | 9.657 6989 | 558   | 0.342 3011 | 9.959 1954 | 95 | 0  | 33 |
| 7 375.5 | 10 | 0.9616 9407 | 463 | 9.657 7548 | 559   | 0.342 2452 | 9.959 1859 | 96 | 50 |    |
| 8 432.0 | 20 | 0.9616 9870 | 463 | 9.657 8107 | 559   | 0.342 1893 | 9.959 1763 | 96 | 40 |    |
| 9 488.5 | 30 | 0.9617 0333 | 463 | 9.657 8666 | 558   | 0.342 1334 | 9.959 1667 | 96 | 30 |    |
|         | 40 | 0.9617 0796 | 462 | 9.657 9224 | 558   | 0.342 0776 | 9.959 1571 | 96 | 20 |    |
|         | 50 | 0.9617 1258 | 463 | 9.657 9783 | 559   | 0.342 0217 | 9.959 1475 | 95 | 10 |    |
| 463     | 28 | 0.9617 1721 | 463 | 9.658 0341 | 558   | 0.341 9659 | 9.959 1380 | 96 | 0  | 32 |
| 1 46.3  | 10 | 0.9617 2184 | 462 | 9.658 0900 | 559   | 0.341 9100 | 9.959 1284 | 96 | 50 |    |
| 2 92.2  | 20 | 0.9617 2646 | 463 | 9.658 1458 | 558   | 0.341 8542 | 9.959 1188 | 96 | 40 |    |
| 3 148.9 | 30 | 0.9617 3109 | 463 | 9.658 2017 | 558   | 0.341 7983 | 9.959 1092 | 96 | 30 |    |
| 4 205.2 | 40 | 0.9617 3572 | 462 | 9.658 2575 | 558   | 0.341 7425 | 9.959 0996 | 96 | 20 |    |
| 5 261.5 | 50 | 0.9617 4034 | 462 | 9.658 3134 | 559   | 0.341 6866 | 9.959 0900 | 96 | 10 |    |
| 6 318.0 | 29 | 0.9617 4496 | 463 | 9.658 3692 | 558   | 0.341 6308 | 9.959 0805 | 95 | 0  | 31 |
| 7 374.3 | 10 | 0.9617 4959 | 462 | 9.658 4250 | 558   | 0.341 5750 | 9.959 0709 | 96 | 50 |    |
| 8 430.4 | 20 | 0.9617 5421 | 462 | 9.658 4808 | 558   | 0.341 5192 | 9.959 0613 | 96 | 40 |    |
| 9 486.4 | 30 | 0.9617 5883 | 462 | 9.658 5366 | 558   | 0.341 4634 | 9.959 0517 | 96 | 30 |    |
|         | 40 | 0.9617 6345 | 463 | 9.658 5924 | 558   | 0.341 4076 | 9.959 0421 | 96 | 20 |    |
|         | 50 | 0.9617 6808 | 462 | 9.658 6483 | 559   | 0.341 3517 | 9.959 0325 | 96 | 10 |    |
|         | 30 | 0.9617 7270 |     | 9.658 7041 | 558   | 0.341 2959 | 9.959 0229 | 96 | 0  | 80 |
|         |    |             |     |            |       |            |            |    |    |    |
|         |    | Cos         | d.  | Cotg       | d. c. | Tang       | Sin        | d. |    |    |



| r  | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Coa        | d. | "  | r  |
|----|----|------------|-----|------------|-------|------------|------------|----|----|----|
| 80 | 0  | 9.617 7270 | 462 | 9.658 7041 | 557   | 0.341 2959 | 9.959 0229 | 96 | 0  | 80 |
|    | 10 | 9.617 7732 | 461 | 9.658 7598 | 558   | 0.341 2402 | 9.959 0133 | 96 | 50 |    |
|    | 20 | 9.617 8193 | 462 | 9.658 8156 | 558   | 0.341 1844 | 9.959 0037 | 96 | 40 |    |
|    | 30 | 9.617 8655 | 462 | 9.658 8714 | 558   | 0.341 1286 | 9.958 9941 | 96 | 30 |    |
|    | 40 | 9.617 9117 | 462 | 9.658 9272 | 558   | 0.341 0728 | 9.958 9845 | 96 | 20 |    |
|    | 50 | 9.617 9579 | 462 | 9.658 9830 | 558   | 0.341 0170 | 9.958 9749 | 96 | 10 |    |
| 81 | 0  | 9.618 0041 | 461 | 9.659 0387 | 557   | 0.340 9613 | 9.958 9653 | 96 | 0  | 29 |
|    | 10 | 9.618 0502 | 462 | 9.659 0945 | 558   | 0.340 9055 | 9.958 9557 | 96 | 50 |    |
|    | 20 | 9.618 0964 | 461 | 9.659 1503 | 557   | 0.340 8497 | 9.958 9461 | 96 | 40 |    |
|    | 30 | 9.618 1425 | 462 | 9.659 2060 | 558   | 0.340 7940 | 9.958 9365 | 96 | 30 |    |
|    | 40 | 9.618 1887 | 461 | 9.659 2618 | 558   | 0.340 7382 | 9.958 9269 | 96 | 20 |    |
|    | 50 | 9.618 2348 | 461 | 9.659 3175 | 557   | 0.340 6825 | 9.958 9173 | 96 | 10 |    |
| 82 | 0  | 9.618 2809 | 462 | 9.659 3733 | 557   | 0.340 6267 | 9.958 9077 | 96 | 0  | 28 |
|    | 10 | 9.618 3271 | 461 | 9.659 4290 | 557   | 0.340 5710 | 9.958 8981 | 96 | 50 |    |
|    | 20 | 9.618 3732 | 461 | 9.659 4847 | 557   | 0.340 5153 | 9.958 8885 | 96 | 40 |    |
|    | 30 | 9.618 4193 | 461 | 9.659 5405 | 558   | 0.340 4595 | 9.958 8788 | 96 | 30 |    |
|    | 40 | 9.618 4654 | 461 | 9.659 5962 | 557   | 0.340 4038 | 9.958 8692 | 96 | 20 |    |
|    | 50 | 9.618 5115 | 461 | 9.659 6519 | 557   | 0.340 3481 | 9.958 8596 | 96 | 10 |    |
| 83 | 0  | 9.618 5576 | 461 | 9.659 7076 | 557   | 0.340 2924 | 9.958 8500 | 96 | 0  | 27 |
|    | 10 | 9.618 6037 | 461 | 9.659 7633 | 557   | 0.340 2367 | 9.958 8404 | 96 | 50 |    |
|    | 20 | 9.618 6498 | 461 | 9.659 8190 | 557   | 0.340 1810 | 9.958 8308 | 96 | 40 |    |
|    | 30 | 9.618 6959 | 461 | 9.659 8747 | 557   | 0.340 1253 | 9.958 8211 | 96 | 30 |    |
|    | 40 | 9.618 7420 | 460 | 9.659 9304 | 557   | 0.340 0696 | 9.958 8115 | 96 | 20 |    |
|    | 50 | 9.618 7880 | 461 | 9.659 9861 | 557   | 0.340 0139 | 9.958 8019 | 96 | 10 |    |
| 84 | 0  | 9.618 8341 | 460 | 9.660 0418 | 557   | 0.339 9582 | 9.958 7923 | 96 | 0  | 26 |
|    | 10 | 9.618 8801 | 461 | 9.660 0975 | 557   | 0.339 9025 | 9.958 7826 | 96 | 50 |    |
|    | 20 | 9.618 9262 | 460 | 9.660 1532 | 557   | 0.339 8468 | 9.958 7730 | 96 | 40 |    |
|    | 30 | 9.618 9722 | 461 | 9.660 2089 | 556   | 0.339 7911 | 9.958 7634 | 96 | 30 |    |
|    | 40 | 9.619 0183 | 460 | 9.660 2645 | 556   | 0.339 7355 | 9.958 7538 | 96 | 20 |    |
|    | 50 | 9.619 0643 | 460 | 9.660 3202 | 556   | 0.339 6798 | 9.958 7441 | 96 | 10 |    |
| 85 | 0  | 9.619 1103 | 461 | 9.660 3758 | 557   | 0.339 6242 | 9.958 7345 | 96 | 0  | 25 |
|    | 10 | 9.619 1564 | 460 | 9.660 4315 | 556   | 0.339 5685 | 9.958 7249 | 96 | 50 |    |
|    | 20 | 9.619 2024 | 460 | 9.660 4871 | 557   | 0.339 5129 | 9.958 7152 | 96 | 40 |    |
|    | 30 | 9.619 2484 | 460 | 9.660 5428 | 556   | 0.339 4572 | 9.958 7056 | 96 | 30 |    |
|    | 40 | 9.619 2944 | 460 | 9.660 5984 | 557   | 0.339 4016 | 9.958 6960 | 96 | 20 |    |
|    | 50 | 9.619 3404 | 460 | 9.660 6541 | 556   | 0.339 3459 | 9.958 6863 | 96 | 10 |    |
| 86 | 0  | 9.619 3864 | 460 | 9.660 7097 | 556   | 0.339 2903 | 9.958 6767 | 96 | 0  | 24 |
|    | 10 | 9.619 4324 | 459 | 9.660 7653 | 556   | 0.339 2347 | 9.958 6670 | 96 | 50 |    |
|    | 20 | 9.619 4783 | 460 | 9.660 8209 | 557   | 0.339 1791 | 9.958 6574 | 96 | 40 |    |
|    | 30 | 9.619 5243 | 460 | 9.660 8766 | 556   | 0.339 1234 | 9.958 6477 | 96 | 30 |    |
|    | 40 | 9.619 5703 | 459 | 9.660 9322 | 556   | 0.339 0678 | 9.958 6381 | 96 | 20 |    |
|    | 50 | 9.619 6162 | 459 | 9.660 9878 | 556   | 0.339 0122 | 9.958 6285 | 96 | 10 |    |
| 87 | 0  | 9.619 6622 | 459 | 9.661 0434 | 556   | 0.338 9566 | 9.958 6188 | 96 | 0  | 23 |
|    | 10 | 9.619 7081 | 460 | 9.661 0990 | 556   | 0.338 9010 | 9.958 6092 | 96 | 50 |    |
|    | 20 | 9.619 7541 | 459 | 9.661 1546 | 556   | 0.338 8454 | 9.958 5995 | 96 | 40 |    |
|    | 30 | 9.619 8000 | 460 | 9.661 2102 | 555   | 0.338 7898 | 9.958 5899 | 96 | 30 |    |
|    | 40 | 9.619 8460 | 459 | 9.661 2657 | 556   | 0.338 7343 | 9.958 5802 | 96 | 20 |    |
|    | 50 | 9.619 8919 | 459 | 9.661 3213 | 556   | 0.338 6787 | 9.958 5706 | 96 | 10 |    |
| 88 | 0  | 9.619 9378 | 459 | 9.661 3769 | 556   | 0.338 6231 | 9.958 5609 | 96 | 0  | 22 |
|    | 10 | 9.619 9837 | 459 | 9.661 4325 | 555   | 0.338 5675 | 9.958 5513 | 96 | 50 |    |
|    | 20 | 9.620 0296 | 459 | 9.661 4880 | 556   | 0.338 5120 | 9.958 5416 | 96 | 40 |    |
|    | 30 | 9.620 0755 | 459 | 9.661 5436 | 556   | 0.338 4564 | 9.958 5319 | 96 | 30 |    |
|    | 40 | 9.620 1214 | 459 | 9.661 5992 | 555   | 0.338 4008 | 9.958 5223 | 96 | 20 |    |
|    | 50 | 9.620 1673 | 459 | 9.661 6547 | 555   | 0.338 3453 | 9.958 5126 | 96 | 10 |    |
| 89 | 0  | 9.620 2132 | 459 | 9.661 7103 | 555   | 0.338 2897 | 9.958 5030 | 96 | 0  | 21 |
|    | 10 | 9.620 2591 | 459 | 9.661 7658 | 555   | 0.338 2342 | 9.958 4933 | 96 | 50 |    |
|    | 20 | 9.620 3050 | 458 | 9.661 8213 | 556   | 0.338 1787 | 9.958 4836 | 96 | 40 |    |
|    | 30 | 9.620 3508 | 459 | 9.661 8769 | 555   | 0.338 1231 | 9.958 4740 | 96 | 30 |    |
|    | 40 | 9.620 3967 | 459 | 9.661 9324 | 555   | 0.338 0676 | 9.958 4643 | 96 | 20 |    |
|    | 50 | 9.620 4426 | 458 | 9.661 9879 | 555   | 0.338 0121 | 9.958 4546 | 96 | 10 |    |
| 40 | 0  | 9.620 4884 |     | 9.662 0434 |       | 0.337 9566 | 9.958 4450 |    | 0  | 20 |
|    |    | Coa        | d.  | Cotg       | d. c. | Tang       | Sin        | d. | "  |    |



565

1 55.5

2 51.0

3 46.5

4 42.0

5 37.5

6 33.0

7 28.5

8 24.0

9 19.5

554

1 55.4

2 51.0

3 46.5

4 42.0

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6 33.0

7 28.5

8 24.0

9 19.5

553

1 55.3

2 51.0

3 46.5

4 42.0

5 37.5

6 33.0

7 28.5

8 24.0

9 19.5

552

1 55.2

2 51.0

3 46.5

4 42.0

5 37.5

6 33.0

7 28.5

8 24.0

9 19.5

551

1 55.1

2 51.0

3 46.5

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550

1 55.0

2 51.0

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4 42.0

5 37.5

6 33.0

7 28.5

8 24.0

9 19.5

|    | <i>n</i> | Sin        | d.  | Tang       | d. c. | Colg       | Coa        | d. | <i>n</i> |    |
|----|----------|------------|-----|------------|-------|------------|------------|----|----------|----|
| 40 | 0        | 9.620 4884 | 458 | 9.662 0434 | 556   | 0.117 9566 | 9.958 4450 | 97 | 0        | 20 |
|    | 10       | 9.620 5342 | 459 | 9.662 0990 | 555   | 0.117 9000 | 9.958 4454 | 97 | 50       |    |
|    | 20       | 9.620 5801 | 458 | 9.662 1545 | 555   | 0.117 8435 | 9.958 4456 | 97 | 40       |    |
|    | 30       | 9.620 6259 | 458 | 9.662 2100 | 555   | 0.117 7870 | 9.958 4450 | 97 | 30       |    |
|    | 40       | 9.620 6717 | 458 | 9.662 2655 | 555   | 0.117 7305 | 9.958 4454 | 97 | 20       |    |
|    | 50       | 9.620 7176 | 458 | 9.662 3210 | 555   | 0.117 6740 | 9.958 4456 | 97 | 10       |    |
| 41 | 0        | 9.620 7634 | 458 | 9.662 3765 | 554   | 0.117 6175 | 9.958 4450 | 97 | 0        | 19 |
|    | 10       | 9.620 8092 | 458 | 9.662 4319 | 555   | 0.117 5610 | 9.958 4454 | 97 | 50       |    |
|    | 20       | 9.620 8550 | 458 | 9.662 4874 | 555   | 0.117 5045 | 9.958 4456 | 97 | 40       |    |
|    | 30       | 9.620 9008 | 458 | 9.662 5429 | 555   | 0.117 4480 | 9.958 4450 | 97 | 30       |    |
|    | 40       | 9.620 9466 | 458 | 9.662 5984 | 555   | 0.117 3915 | 9.958 4454 | 97 | 20       |    |
|    | 50       | 9.620 9924 | 458 | 9.662 6538 | 555   | 0.117 3350 | 9.958 4456 | 97 | 10       |    |
| 42 | 0        | 9.621 0382 | 457 | 9.662 7093 | 555   | 0.117 2785 | 9.958 4450 | 97 | 0        | 18 |
|    | 10       | 9.621 0840 | 458 | 9.662 7648 | 554   | 0.117 2220 | 9.958 4454 | 97 | 50       |    |
|    | 20       | 9.621 1297 | 458 | 9.662 8203 | 555   | 0.117 1655 | 9.958 4456 | 97 | 40       |    |
|    | 30       | 9.621 1755 | 457 | 9.662 8757 | 555   | 0.117 1090 | 9.958 4450 | 97 | 30       |    |
|    | 40       | 9.621 2212 | 458 | 9.662 9312 | 555   | 0.117 0525 | 9.958 4454 | 97 | 20       |    |
|    | 50       | 9.621 2670 | 457 | 9.662 9866 | 554   | 0.117 0000 | 9.958 4456 | 97 | 10       |    |
| 43 | 0        | 9.621 3127 | 457 | 9.663 0421 | 554   | 0.116 9435 | 9.958 4450 | 97 | 0        | 17 |
|    | 10       | 9.621 3584 | 458 | 9.663 0974 | 555   | 0.116 8870 | 9.958 4454 | 97 | 50       |    |
|    | 20       | 9.621 4042 | 457 | 9.663 1529 | 554   | 0.116 8305 | 9.958 4456 | 97 | 40       |    |
|    | 30       | 9.621 4499 | 457 | 9.663 2084 | 554   | 0.116 7740 | 9.958 4450 | 97 | 30       |    |
|    | 40       | 9.621 4956 | 457 | 9.663 2637 | 554   | 0.116 7175 | 9.958 4454 | 97 | 20       |    |
|    | 50       | 9.621 5414 | 458 | 9.663 3191 | 554   | 0.116 6610 | 9.958 4456 | 97 | 10       |    |
| 44 | 0        | 9.621 5871 | 457 | 9.663 3745 | 554   | 0.116 6045 | 9.958 4450 | 97 | 0        | 16 |
|    | 10       | 9.621 6328 | 457 | 9.663 4299 | 554   | 0.116 5480 | 9.958 4454 | 97 | 50       |    |
|    | 20       | 9.621 6785 | 457 | 9.663 4854 | 554   | 0.116 4915 | 9.958 4456 | 97 | 40       |    |
|    | 30       | 9.621 7242 | 456 | 9.663 5407 | 554   | 0.116 4350 | 9.958 4450 | 97 | 30       |    |
|    | 40       | 9.621 7699 | 456 | 9.663 5961 | 554   | 0.116 3785 | 9.958 4454 | 97 | 20       |    |
|    | 50       | 9.621 8155 | 457 | 9.663 6515 | 554   | 0.116 3220 | 9.958 4456 | 97 | 10       |    |
| 45 | 0        | 9.621 8612 | 457 | 9.663 7069 | 554   | 0.116 2655 | 9.958 4450 | 97 | 0        | 15 |
|    | 10       | 9.621 9069 | 456 | 9.663 7624 | 554   | 0.116 2090 | 9.958 4454 | 97 | 50       |    |
|    | 20       | 9.621 9525 | 457 | 9.663 8178 | 554   | 0.116 1525 | 9.958 4456 | 97 | 40       |    |
|    | 30       | 9.621 9982 | 456 | 9.663 8733 | 554   | 0.116 0960 | 9.958 4450 | 97 | 30       |    |
|    | 40       | 9.622 0438 | 457 | 9.663 9287 | 554   | 0.116 0395 | 9.958 4454 | 97 | 20       |    |
|    | 50       | 9.622 0895 | 456 | 9.663 9842 | 554   | 0.115 9830 | 9.958 4456 | 97 | 10       |    |
| 46 | 0        | 9.622 1351 | 457 | 9.664 0396 | 554   | 0.115 9265 | 9.958 4450 | 97 | 0        | 14 |
|    | 10       | 9.622 1808 | 456 | 9.664 0951 | 554   | 0.115 8700 | 9.958 4454 | 97 | 50       |    |
|    | 20       | 9.622 2264 | 456 | 9.664 1505 | 554   | 0.115 8135 | 9.958 4456 | 97 | 40       |    |
|    | 30       | 9.622 2721 | 456 | 9.664 2059 | 554   | 0.115 7570 | 9.958 4450 | 97 | 30       |    |
|    | 40       | 9.622 3176 | 456 | 9.664 2614 | 554   | 0.115 7005 | 9.958 4454 | 97 | 20       |    |
|    | 50       | 9.622 3632 | 456 | 9.664 3168 | 554   | 0.115 6440 | 9.958 4456 | 97 | 10       |    |
| 47 | 0        | 9.622 4088 | 456 | 9.664 3723 | 554   | 0.115 5875 | 9.958 4450 | 97 | 0        | 13 |
|    | 10       | 9.622 4544 | 456 | 9.664 4277 | 554   | 0.115 5310 | 9.958 4454 | 97 | 50       |    |
|    | 20       | 9.622 5000 | 456 | 9.664 4832 | 554   | 0.115 4745 | 9.958 4456 | 97 | 40       |    |
|    | 30       | 9.622 5456 | 456 | 9.664 5386 | 554   | 0.115 4180 | 9.958 4450 | 97 | 30       |    |
|    | 40       | 9.622 5912 | 456 | 9.664 5941 | 554   | 0.115 3615 | 9.958 4454 | 97 | 20       |    |
|    | 50       | 9.622 6368 | 456 | 9.664 6495 | 554   | 0.115 3050 | 9.958 4456 | 97 | 10       |    |
| 48 | 0        | 9.622 6824 | 455 | 9.664 7050 | 554   | 0.115 2485 | 9.958 4450 | 97 | 0        | 12 |
|    | 10       | 9.622 7279 | 456 | 9.664 7604 | 554   | 0.115 1920 | 9.958 4454 | 97 | 50       |    |
|    | 20       | 9.622 7735 | 455 | 9.664 8159 | 554   | 0.115 1355 | 9.958 4456 | 97 | 40       |    |
|    | 30       | 9.622 8190 | 456 | 9.664 8713 | 554   | 0.115 0790 | 9.958 4450 | 97 | 30       |    |
|    | 40       | 9.622 8646 | 456 | 9.664 9268 | 554   | 0.115 0225 | 9.958 4454 | 97 | 20       |    |
|    | 50       | 9.622 9101 | 455 | 9.664 9822 | 554   | 0.114 9660 | 9.958 4456 | 97 | 10       |    |
| 49 | 0        | 9.622 9557 | 455 | 9.665 0377 | 554   | 0.114 9095 | 9.958 4450 | 97 | 0        | 11 |
|    | 10       | 9.623 0012 | 455 | 9.665 0931 | 554   | 0.114 8530 | 9.958 4454 | 97 | 50       |    |
|    | 20       | 9.623 0467 | 455 | 9.665 1486 | 554   | 0.114 7965 | 9.958 4456 | 97 | 40       |    |
|    | 30       | 9.623 0922 | 455 | 9.665 2040 | 554   | 0.114 7400 | 9.958 4450 | 97 | 30       |    |
|    | 40       | 9.623 1377 | 455 | 9.665 2595 | 554   | 0.114 6835 | 9.958 4454 | 97 | 20       |    |
|    | 50       | 9.623 1832 | 455 | 9.665 3149 | 554   | 0.114 6270 | 9.958 4456 | 97 | 10       |    |
| 50 | 0        | 9.623 2287 | 455 | 9.665 3704 | 554   | 0.114 5705 | 9.958 4450 | 97 | 0        | 10 |
|    | <i>n</i> | Coa        | d.  | Colg       | d. c. | Tang       | Sin        | d. | <i>n</i> |    |



|    | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d. | "  |    |
|----|----|------------|-----|------------|-------|------------|------------|----|----|----|
| 50 | 0  | 9.623 2287 | 455 | 9.665 3662 | 552   | 0.334 6338 | 9.957 8626 | 98 | 0  | 10 |
|    | 10 | 9.623 2742 | 455 | 9.665 4214 | 553   | 0.334 5786 | 9.957 8528 | 97 | 50 |    |
|    | 20 | 9.623 3197 | 455 | 9.665 4767 | 552   | 0.334 5233 | 9.957 8431 | 98 | 40 |    |
|    | 30 | 9.623 3652 | 455 | 9.665 5319 | 552   | 0.334 4681 | 9.957 8333 | 97 | 30 |    |
|    | 40 | 9.623 4107 | 455 | 9.665 5871 | 552   | 0.334 4129 | 9.957 8236 | 98 | 20 |    |
|    | 50 | 9.623 4562 | 455 | 9.665 6423 | 552   | 0.334 3577 | 9.957 8138 | 97 | 10 |    |
| 51 | 0  | 9.623 5016 | 454 | 9.665 6975 | 552   | 0.334 3025 | 9.957 8041 | 98 | 0  | 9  |
|    | 10 | 9.623 5471 | 454 | 9.665 7528 | 553   | 0.334 2472 | 9.957 7943 | 97 | 50 |    |
|    | 20 | 9.623 5925 | 454 | 9.665 8080 | 552   | 0.334 1920 | 9.957 7846 | 98 | 40 |    |
|    | 30 | 9.623 6380 | 454 | 9.665 8632 | 552   | 0.334 1368 | 9.957 7748 | 97 | 30 |    |
|    | 40 | 9.623 6834 | 454 | 9.665 9184 | 552   | 0.334 0816 | 9.957 7651 | 98 | 20 |    |
|    | 50 | 9.623 7289 | 454 | 9.665 9736 | 552   | 0.334 0264 | 9.957 7553 | 97 | 10 |    |
| 52 | 0  | 9.623 7743 | 454 | 9.666 0288 | 552   | 0.333 9712 | 9.957 7456 | 98 | 0  | 8  |
|    | 10 | 9.623 8197 | 454 | 9.666 0839 | 551   | 0.333 9161 | 9.957 7358 | 97 | 50 |    |
|    | 20 | 9.623 8652 | 455 | 9.666 1391 | 552   | 0.333 8609 | 9.957 7260 | 98 | 40 |    |
|    | 30 | 9.623 9106 | 454 | 9.666 1943 | 552   | 0.333 8057 | 9.957 7163 | 97 | 30 |    |
|    | 40 | 9.623 9560 | 454 | 9.666 2495 | 552   | 0.333 7505 | 9.957 7065 | 98 | 20 |    |
|    | 50 | 9.624 0014 | 454 | 9.666 3046 | 551   | 0.333 6954 | 9.957 6967 | 97 | 10 |    |
| 53 | 0  | 9.624 0468 | 454 | 9.666 3598 | 552   | 0.333 6402 | 9.957 6870 | 98 | 0  | 7  |
|    | 10 | 9.624 0922 | 454 | 9.666 4150 | 552   | 0.333 5850 | 9.957 6772 | 97 | 50 |    |
|    | 20 | 9.624 1376 | 454 | 9.666 4701 | 551   | 0.333 5299 | 9.957 6674 | 98 | 40 |    |
|    | 30 | 9.624 1829 | 453 | 9.666 5253 | 552   | 0.333 4747 | 9.957 6577 | 97 | 30 |    |
|    | 40 | 9.624 2283 | 454 | 9.666 5804 | 551   | 0.333 4196 | 9.957 6479 | 98 | 20 |    |
|    | 50 | 9.624 2737 | 454 | 9.666 6355 | 551   | 0.333 3645 | 9.957 6381 | 97 | 10 |    |
| 54 | 0  | 9.624 3190 | 453 | 9.666 6907 | 552   | 0.333 3093 | 9.957 6284 | 98 | 0  | 6  |
|    | 10 | 9.624 3644 | 454 | 9.666 7458 | 551   | 0.333 2542 | 9.957 6186 | 97 | 50 |    |
|    | 20 | 9.624 4097 | 453 | 9.666 8009 | 552   | 0.333 1991 | 9.957 6088 | 98 | 40 |    |
|    | 30 | 9.624 4551 | 454 | 9.666 8561 | 552   | 0.333 1439 | 9.957 5990 | 97 | 30 |    |
|    | 40 | 9.624 5004 | 453 | 9.666 9112 | 551   | 0.333 0888 | 9.957 5893 | 98 | 20 |    |
|    | 50 | 9.624 5458 | 454 | 9.666 9663 | 551   | 0.333 0337 | 9.957 5795 | 97 | 10 |    |
| 55 | 0  | 9.624 5911 | 453 | 9.667 0214 | 551   | 0.332 9786 | 9.957 5697 | 98 | 0  | 5  |
|    | 10 | 9.624 6364 | 453 | 9.667 0765 | 551   | 0.332 9235 | 9.957 5599 | 97 | 50 |    |
|    | 20 | 9.624 6817 | 453 | 9.667 1316 | 551   | 0.332 8684 | 9.957 5501 | 98 | 40 |    |
|    | 30 | 9.624 7270 | 453 | 9.667 1867 | 551   | 0.332 8133 | 9.957 5403 | 97 | 30 |    |
|    | 40 | 9.624 7723 | 453 | 9.667 2418 | 551   | 0.332 7582 | 9.957 5306 | 98 | 20 |    |
|    | 50 | 9.624 8176 | 453 | 9.667 2969 | 550   | 0.332 7031 | 9.957 5208 | 97 | 10 |    |
| 56 | 0  | 9.624 8629 | 453 | 9.667 3519 | 550   | 0.332 6481 | 9.957 5110 | 98 | 0  | 4  |
|    | 10 | 9.624 9082 | 453 | 9.667 4070 | 551   | 0.332 5930 | 9.957 5012 | 97 | 50 |    |
|    | 20 | 9.624 9535 | 453 | 9.667 4621 | 551   | 0.332 5379 | 9.957 4914 | 98 | 40 |    |
|    | 30 | 9.624 9988 | 453 | 9.667 5172 | 550   | 0.332 4828 | 9.957 4816 | 97 | 30 |    |
|    | 40 | 9.625 0441 | 452 | 9.667 5722 | 551   | 0.332 4278 | 9.957 4718 | 98 | 20 |    |
|    | 50 | 9.625 0893 | 453 | 9.667 6273 | 550   | 0.332 3727 | 9.957 4620 | 97 | 10 |    |
| 57 | 0  | 9.625 1346 | 452 | 9.667 6823 | 551   | 0.332 3177 | 9.957 4522 | 98 | 0  | 3  |
|    | 10 | 9.625 1798 | 453 | 9.667 7374 | 550   | 0.332 2626 | 9.957 4424 | 97 | 50 |    |
|    | 20 | 9.625 2251 | 452 | 9.667 7924 | 551   | 0.332 2076 | 9.957 4326 | 98 | 40 |    |
|    | 30 | 9.625 2703 | 453 | 9.667 8475 | 550   | 0.332 1525 | 9.957 4228 | 97 | 30 |    |
|    | 40 | 9.625 3156 | 453 | 9.667 9025 | 550   | 0.332 0975 | 9.957 4130 | 98 | 20 |    |
|    | 50 | 9.625 3608 | 452 | 9.667 9575 | 551   | 0.332 0425 | 9.957 4032 | 97 | 10 |    |
| 58 | 0  | 9.625 4060 | 452 | 9.668 0126 | 551   | 0.331 9874 | 9.957 3934 | 98 | 0  | 2  |
|    | 10 | 9.625 4512 | 452 | 9.668 0676 | 550   | 0.331 9324 | 9.957 3836 | 97 | 50 |    |
|    | 20 | 9.625 4964 | 453 | 9.668 1226 | 550   | 0.331 8774 | 9.957 3738 | 98 | 40 |    |
|    | 30 | 9.625 5417 | 452 | 9.668 1776 | 550   | 0.331 8224 | 9.957 3640 | 97 | 30 |    |
|    | 40 | 9.625 5869 | 451 | 9.668 2326 | 550   | 0.331 7674 | 9.957 3542 | 98 | 20 |    |
|    | 50 | 9.625 6320 | 451 | 9.668 2876 | 550   | 0.331 7124 | 9.957 3444 | 97 | 10 |    |
| 59 | 0  | 9.625 6772 | 452 | 9.668 3426 | 550   | 0.331 6574 | 9.957 3346 | 98 | 0  | 1  |
|    | 10 | 9.625 7224 | 452 | 9.668 3976 | 550   | 0.331 6024 | 9.957 3248 | 97 | 50 |    |
|    | 20 | 9.625 7676 | 452 | 9.668 4526 | 550   | 0.331 5474 | 9.957 3150 | 98 | 40 |    |
|    | 30 | 9.625 8128 | 451 | 9.668 5076 | 550   | 0.331 4924 | 9.957 3052 | 97 | 30 |    |
|    | 40 | 9.625 8579 | 452 | 9.668 5626 | 550   | 0.331 4374 | 9.957 2953 | 98 | 20 |    |
|    | 50 | 9.625 9031 | 452 | 9.668 6176 | 549   | 0.331 3824 | 9.957 2855 | 97 | 10 |    |
| 60 | 0  | 9.625 9483 | 452 | 9.668 6725 |       | 0.331 3275 | 9.957 2757 | 98 | 0  | 0  |
|    |    | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d. | "  |    |



540

1 54.0  
2 109.6  
3 164.7  
4 219.6  
5 274.5  
6 329.4  
7 384.3  
8 439.2  
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548

1 54.8  
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547

1 54.7  
2 109.4  
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5 273.5  
6 328.2  
7 382.9  
8 437.6  
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451

1 45.1  
2 90.4  
3 135.3  
4 180.4  
5 225.5  
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449

1 44.9  
2 89.8  
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98

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7 686.0  
8 784.0  
9 882.0

|    | n  | Sin        | d.  | Tang       | d. c. | Cotg       | Con        | d. | n  |    |
|----|----|------------|-----|------------|-------|------------|------------|----|----|----|
| 1  | 0  | 9.625 9483 | 451 | 9.668 6725 | 550   | 0.111 1475 | 9.957 2757 | 98 | 0  | 60 |
|    | 10 | 9.625 9934 | 452 | 9.668 7275 | 550   | 0.111 1475 | 9.957 2659 | 98 | 50 |    |
|    | 20 | 9.626 0386 | 451 | 9.668 7825 | 549   | 0.111 1475 | 9.957 2561 | 98 | 40 |    |
|    | 30 | 9.626 0837 | 451 | 9.668 8374 | 549   | 0.111 1475 | 9.957 2463 | 98 | 30 |    |
|    | 40 | 9.626 1288 | 451 | 9.668 8924 | 549   | 0.111 1475 | 9.957 2365 | 98 | 20 |    |
| 1  | 50 | 9.626 1740 | 452 | 9.668 9474 | 549   | 0.111 1475 | 9.957 2267 | 98 | 10 |    |
|    | 0  | 9.626 2191 | 451 | 9.669 0024 | 549   | 0.111 0927 | 9.957 2168 | 98 | 0  | 50 |
|    | 10 | 9.626 2642 | 451 | 9.669 0573 | 550   | 0.110 9478 | 9.957 2070 | 98 | 50 |    |
|    | 20 | 9.626 3093 | 451 | 9.669 1122 | 549   | 0.110 8028 | 9.957 1971 | 98 | 40 |    |
|    | 30 | 9.626 3544 | 451 | 9.669 1671 | 549   | 0.110 6578 | 9.957 1873 | 98 | 30 |    |
| 2  | 40 | 9.626 3995 | 451 | 9.669 2220 | 549   | 0.110 5128 | 9.957 1774 | 98 | 20 |    |
|    | 50 | 9.626 4446 | 451 | 9.669 2770 | 549   | 0.110 3678 | 9.957 1676 | 98 | 10 |    |
|    | 0  | 9.626 4897 | 451 | 9.669 3319 | 549   | 0.110 2228 | 9.957 1577 | 98 | 0  | 58 |
|    | 10 | 9.626 5348 | 451 | 9.669 3868 | 549   | 0.110 0778 | 9.957 1478 | 98 | 50 |    |
|    | 20 | 9.626 5798 | 451 | 9.669 4417 | 549   | 0.109 9328 | 9.957 1380 | 98 | 40 |    |
| 3  | 30 | 9.626 6249 | 451 | 9.669 4966 | 549   | 0.109 7878 | 9.957 1281 | 98 | 30 |    |
|    | 40 | 9.626 6700 | 451 | 9.669 5515 | 549   | 0.109 6428 | 9.957 1182 | 98 | 20 |    |
|    | 50 | 9.626 7150 | 451 | 9.669 6064 | 549   | 0.109 4978 | 9.957 1083 | 98 | 10 |    |
|    | 0  | 9.626 7601 | 451 | 9.669 6613 | 549   | 0.109 3528 | 9.957 0984 | 98 | 0  | 57 |
|    | 10 | 9.626 8052 | 451 | 9.669 7162 | 549   | 0.109 2078 | 9.957 0885 | 98 | 50 |    |
| 4  | 20 | 9.626 8502 | 451 | 9.669 7711 | 549   | 0.109 0628 | 9.957 0786 | 98 | 40 |    |
|    | 30 | 9.626 8953 | 450 | 9.669 8260 | 548   | 0.108 9178 | 9.957 0687 | 98 | 30 |    |
|    | 40 | 9.626 9403 | 450 | 9.669 8809 | 548   | 0.108 7728 | 9.957 0588 | 98 | 20 |    |
|    | 50 | 9.626 9854 | 450 | 9.669 9358 | 548   | 0.108 6278 | 9.957 0489 | 98 | 10 |    |
|    | 0  | 9.627 0304 | 450 | 9.669 9907 | 548   | 0.108 4828 | 9.957 0390 | 98 | 0  | 56 |
| 5  | 10 | 9.627 0755 | 450 | 9.670 0456 | 548   | 0.108 3378 | 9.957 0291 | 98 | 50 |    |
|    | 20 | 9.627 1205 | 450 | 9.670 1005 | 548   | 0.108 1928 | 9.957 0192 | 98 | 40 |    |
|    | 30 | 9.627 1656 | 450 | 9.670 1554 | 548   | 0.108 0478 | 9.957 0093 | 98 | 30 |    |
|    | 40 | 9.627 2106 | 450 | 9.670 2103 | 548   | 0.107 9028 | 9.957 0094 | 98 | 20 |    |
|    | 50 | 9.627 2557 | 450 | 9.670 2652 | 548   | 0.107 7578 | 9.957 0095 | 98 | 10 |    |
| 6  | 0  | 9.627 3007 | 450 | 9.670 3201 | 548   | 0.107 6128 | 9.957 0096 | 98 | 0  | 55 |
|    | 10 | 9.627 3458 | 449 | 9.670 3750 | 548   | 0.107 4678 | 9.957 0097 | 98 | 50 |    |
|    | 20 | 9.627 3908 | 449 | 9.670 4299 | 548   | 0.107 3228 | 9.957 0098 | 98 | 40 |    |
|    | 30 | 9.627 4359 | 449 | 9.670 4848 | 548   | 0.107 1778 | 9.957 0099 | 98 | 30 |    |
|    | 40 | 9.627 4809 | 449 | 9.670 5397 | 548   | 0.107 0328 | 9.957 0100 | 98 | 20 |    |
| 7  | 50 | 9.627 5260 | 449 | 9.670 5946 | 548   | 0.106 8878 | 9.957 0101 | 98 | 10 |    |
|    | 0  | 9.627 5710 | 449 | 9.670 6495 | 548   | 0.106 7428 | 9.957 0102 | 98 | 0  | 54 |
|    | 10 | 9.627 6160 | 449 | 9.670 7044 | 548   | 0.106 5978 | 9.957 0103 | 98 | 50 |    |
|    | 20 | 9.627 6611 | 449 | 9.670 7593 | 548   | 0.106 4528 | 9.957 0104 | 98 | 40 |    |
|    | 30 | 9.627 7061 | 449 | 9.670 8142 | 548   | 0.106 3078 | 9.957 0105 | 98 | 30 |    |
| 8  | 40 | 9.627 7512 | 449 | 9.670 8691 | 548   | 0.106 1628 | 9.957 0106 | 98 | 20 |    |
|    | 50 | 9.627 7962 | 449 | 9.670 9240 | 548   | 0.106 0178 | 9.957 0107 | 98 | 10 |    |
|    | 0  | 9.627 8413 | 449 | 9.670 9789 | 548   | 0.105 8728 | 9.957 0108 | 98 | 0  | 53 |
|    | 10 | 9.627 8863 | 449 | 9.671 0338 | 548   | 0.105 7278 | 9.957 0109 | 98 | 50 |    |
|    | 20 | 9.627 9314 | 449 | 9.671 0887 | 547   | 0.105 5828 | 9.957 0110 | 98 | 40 |    |
| 9  | 30 | 9.627 9764 | 449 | 9.671 1436 | 547   | 0.105 4378 | 9.957 0111 | 98 | 30 |    |
|    | 40 | 9.628 0215 | 449 | 9.671 1985 | 548   | 0.105 2928 | 9.957 0112 | 98 | 20 |    |
|    | 50 | 9.628 0665 | 449 | 9.671 2534 | 547   | 0.105 1478 | 9.957 0113 | 98 | 10 |    |
|    | 0  | 9.628 1116 | 449 | 9.671 3083 | 547   | 0.105 0028 | 9.957 0114 | 98 | 0  | 52 |
|    | 10 | 9.628 1566 | 449 | 9.671 3632 | 547   | 0.104 8578 | 9.957 0115 | 98 | 50 |    |
| 10 | 20 | 9.628 2017 | 449 | 9.671 4181 | 547   | 0.104 7128 | 9.957 0116 | 98 | 40 |    |
|    | 30 | 9.628 2467 | 448 | 9.671 4730 | 547   | 0.104 5678 | 9.957 0117 | 98 | 30 |    |
|    | 40 | 9.628 2918 | 448 | 9.671 5279 | 547   | 0.104 4228 | 9.957 0118 | 98 | 20 |    |
|    | 50 | 9.628 3368 | 448 | 9.671 5828 | 547   | 0.104 2778 | 9.957 0119 | 98 | 10 |    |
|    | 0  | 9.628 3819 | 448 | 9.671 6377 | 547   | 0.104 1328 | 9.957 0120 | 98 | 0  | 51 |
| 10 | 10 | 9.628 4269 | 448 | 9.671 6926 | 547   | 0.103 9878 | 9.957 0121 | 98 | 50 |    |
|    | 20 | 9.628 4720 | 448 | 9.671 7475 | 547   | 0.103 8428 | 9.957 0122 | 98 | 40 |    |
|    | 30 | 9.628 5170 | 448 | 9.671 8024 | 547   | 0.103 6978 | 9.957 0123 | 98 | 30 |    |
|    | 40 | 9.628 5621 | 448 | 9.671 8573 | 547   | 0.103 5528 | 9.957 0124 | 98 | 20 |    |
|    | 50 | 9.628 6071 | 448 | 9.671 9122 | 547   | 0.103 4078 | 9.957 0125 | 98 | 10 |    |
| 10 | 0  | 9.628 6522 | 448 | 9.671 9671 | 547   | 0.103 2628 | 9.957 0126 | 98 | 0  | 50 |



| r  | "  | Sin        | d.  | Tang       | d. c. | Cotgr      | Cos        | d.  | "  | '  |
|----|----|------------|-----|------------|-------|------------|------------|-----|----|----|
| 10 | o  | 9.628 6472 | 448 | 9.671 9628 | 547   | 0.328 0372 | 9.956 6844 | 99  | o  | 50 |
|    | 10 | 9.628 6920 | 448 | 9.672 0175 | 547   | 0.327 9825 | 9.956 6745 | 99  | 50 |    |
|    | 20 | 9.628 7368 | 448 | 9.672 0722 | 547   | 0.327 9278 | 9.956 6646 | 99  | 40 |    |
|    | 30 | 9.628 7816 | 448 | 9.672 1269 | 547   | 0.327 8731 | 9.956 6547 | 99  | 30 |    |
|    | 40 | 9.628 8264 | 448 | 9.672 1816 | 547   | 0.327 8184 | 9.956 6448 | 99  | 20 |    |
|    | 50 | 9.628 8712 | 448 | 9.672 2363 | 547   | 0.327 7637 | 9.956 6349 | 99  | 10 |    |
| 11 | o  | 9.628 9160 | 447 | 9.672 2910 | 546   | 0.327 7090 | 9.956 6250 | 99  | o  | 49 |
|    | 10 | 9.628 9607 | 448 | 9.672 3456 | 547   | 0.327 6544 | 9.956 6151 | 99  | 50 |    |
|    | 20 | 9.629 0055 | 448 | 9.672 4003 | 547   | 0.327 5997 | 9.956 6052 | 99  | 40 |    |
|    | 30 | 9.629 0503 | 447 | 9.672 4550 | 546   | 0.327 5450 | 9.956 5953 | 99  | 30 |    |
|    | 40 | 9.629 0950 | 448 | 9.672 5096 | 547   | 0.327 4904 | 9.956 5854 | 99  | 20 |    |
|    | 50 | 9.629 1398 | 447 | 9.672 5643 | 547   | 0.327 4357 | 9.956 5755 | 99  | 10 |    |
| 12 | o  | 9.629 1845 | 448 | 9.672 6190 | 546   | 0.327 3810 | 9.956 5656 | 99  | o  | 48 |
|    | 10 | 9.629 2293 | 447 | 9.672 6736 | 547   | 0.327 3264 | 9.956 5557 | 99  | 50 |    |
|    | 20 | 9.629 2740 | 447 | 9.672 7283 | 546   | 0.327 2717 | 9.956 5458 | 100 | 40 |    |
|    | 30 | 9.629 3187 | 448 | 9.672 7829 | 546   | 0.327 2171 | 9.956 5358 | 99  | 30 |    |
|    | 40 | 9.629 3635 | 447 | 9.672 8375 | 547   | 0.327 1625 | 9.956 5259 | 99  | 20 |    |
|    | 50 | 9.629 4082 | 447 | 9.672 8922 | 546   | 0.327 1078 | 9.956 5160 | 99  | 10 |    |
| 13 | o  | 9.629 4529 | 447 | 9.672 9468 | 546   | 0.327 0532 | 9.956 5061 | 99  | o  | 47 |
|    | 10 | 9.629 4976 | 447 | 9.673 0014 | 546   | 0.326 9986 | 9.956 4962 | 99  | 50 |    |
|    | 20 | 9.629 5423 | 447 | 9.673 0560 | 547   | 0.326 9440 | 9.956 4863 | 99  | 40 |    |
|    | 30 | 9.629 5870 | 447 | 9.673 1107 | 546   | 0.326 8893 | 9.956 4764 | 100 | 30 |    |
|    | 40 | 9.629 6317 | 447 | 9.673 1653 | 546   | 0.326 8347 | 9.956 4664 | 99  | 20 |    |
|    | 50 | 9.629 6764 | 447 | 9.673 2199 | 546   | 0.326 7801 | 9.956 4565 | 99  | 10 |    |
| 14 | o  | 9.629 7211 | 446 | 9.673 2745 | 546   | 0.326 7255 | 9.956 4466 | 99  | o  | 46 |
|    | 10 | 9.629 7657 | 447 | 9.673 3291 | 546   | 0.326 6709 | 9.956 4367 | 100 | 50 |    |
|    | 20 | 9.629 8104 | 447 | 9.673 3837 | 546   | 0.326 6163 | 9.956 4267 | 99  | 40 |    |
|    | 30 | 9.629 8551 | 446 | 9.673 4383 | 545   | 0.326 5617 | 9.956 4168 | 99  | 30 |    |
|    | 40 | 9.629 8997 | 447 | 9.673 4928 | 546   | 0.326 5072 | 9.956 4069 | 99  | 20 |    |
|    | 50 | 9.629 9444 | 446 | 9.673 5474 | 546   | 0.326 4526 | 9.956 3970 | 100 | 10 |    |
| 15 | o  | 9.629 9890 | 447 | 9.673 6020 | 546   | 0.326 3980 | 9.956 3870 | 99  | o  | 45 |
|    | 10 | 9.630 0337 | 446 | 9.673 6566 | 545   | 0.326 3434 | 9.956 3771 | 99  | 50 |    |
|    | 20 | 9.630 0783 | 446 | 9.673 7111 | 546   | 0.326 2889 | 9.956 3672 | 100 | 40 |    |
|    | 30 | 9.630 1229 | 446 | 9.673 7657 | 546   | 0.326 2343 | 9.956 3572 | 99  | 30 |    |
|    | 40 | 9.630 1676 | 447 | 9.673 8203 | 545   | 0.326 1797 | 9.956 3473 | 99  | 20 |    |
|    | 50 | 9.630 2122 | 446 | 9.673 8748 | 546   | 0.326 1252 | 9.956 3374 | 100 | 10 |    |
| 16 | o  | 9.630 2568 | 446 | 9.673 9294 | 545   | 0.326 0706 | 9.956 3274 | 99  | o  | 44 |
|    | 10 | 9.630 3014 | 446 | 9.673 9839 | 545   | 0.326 0161 | 9.956 3175 | 99  | 50 |    |
|    | 20 | 9.630 3460 | 446 | 9.674 0384 | 546   | 0.325 9616 | 9.956 3076 | 100 | 40 |    |
|    | 30 | 9.630 3906 | 446 | 9.674 0930 | 545   | 0.325 9070 | 9.956 2976 | 99  | 30 |    |
|    | 40 | 9.630 4352 | 446 | 9.674 1475 | 545   | 0.325 8525 | 9.956 2877 | 100 | 20 |    |
|    | 50 | 9.630 4798 | 445 | 9.674 2020 | 546   | 0.325 7980 | 9.956 2777 | 99  | 10 |    |
| 17 | o  | 9.630 5243 | 446 | 9.674 2566 | 545   | 0.325 7434 | 9.956 2678 | 100 | o  | 43 |
|    | 10 | 9.630 5689 | 446 | 9.674 3111 | 545   | 0.325 6889 | 9.956 2578 | 99  | 50 |    |
|    | 20 | 9.630 6135 | 445 | 9.674 3656 | 545   | 0.325 6344 | 9.956 2479 | 100 | 40 |    |
|    | 30 | 9.630 6580 | 445 | 9.674 4201 | 545   | 0.325 5799 | 9.956 2379 | 99  | 30 |    |
|    | 40 | 9.630 7026 | 446 | 9.674 4746 | 545   | 0.325 5254 | 9.956 2280 | 100 | 20 |    |
|    | 50 | 9.630 7472 | 445 | 9.674 5291 | 545   | 0.325 4709 | 9.956 2180 | 99  | 10 |    |
| 18 | o  | 9.630 7917 | 445 | 9.674 5836 | 545   | 0.325 4164 | 9.956 2081 | 100 | o  | 42 |
|    | 10 | 9.630 8362 | 446 | 9.674 6381 | 545   | 0.325 3619 | 9.956 1981 | 99  | 50 |    |
|    | 20 | 9.630 8808 | 445 | 9.674 6926 | 545   | 0.325 3074 | 9.956 1882 | 100 | 40 |    |
|    | 30 | 9.630 9253 | 445 | 9.674 7471 | 545   | 0.325 2529 | 9.956 1782 | 99  | 30 |    |
|    | 40 | 9.630 9698 | 445 | 9.674 8016 | 544   | 0.325 1984 | 9.956 1683 | 100 | 20 |    |
|    | 50 | 9.631 0143 | 446 | 9.674 8560 | 544   | 0.325 1440 | 9.956 1583 | 100 | 10 |    |
| 19 | o  | 9.631 0589 | 445 | 9.674 9105 | 545   | 0.325 0895 | 9.956 1483 | 99  | o  | 41 |
|    | 10 | 9.631 1034 | 445 | 9.674 9650 | 544   | 0.325 0350 | 9.956 1384 | 100 | 50 |    |
|    | 20 | 9.631 1479 | 445 | 9.675 0194 | 545   | 0.324 9806 | 9.956 1284 | 99  | 40 |    |
|    | 30 | 9.631 1924 | 444 | 9.675 0739 | 545   | 0.324 9261 | 9.956 1185 | 100 | 30 |    |
|    | 40 | 9.631 2368 | 445 | 9.675 1283 | 544   | 0.324 8717 | 9.956 1085 | 100 | 20 |    |
|    | 50 | 9.631 2813 | 445 | 9.675 1828 | 545   | 0.324 8172 | 9.956 0985 | 99  | 10 |    |
| 20 | o  | 9.631 3258 | 445 | 9.675 2372 | 544   | 0.324 7628 | 9.956 0886 |     | o  | 40 |
|    |    |            |     |            |       |            |            |     |    |    |
|    |    | Cos        | d.  | Cotgr      | d. c. | Tang       | Sin        | d.  | "  | '  |



[illegible]



|    | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d.  | "  |    |
|----|----|------------|-----|------------|-------|------------|------------|-----|----|----|
| 30 | 0  | 9.633 9844 | 441 | 9.678 4961 | 542   | 0.321 5039 | 9.955 4882 | 100 | 0  | 30 |
|    | 10 | 9.634 0285 | 441 | 9.678 5503 | 542   | 0.321 4497 | 9.955 4782 | 100 | 50 |    |
|    | 20 | 9.634 0726 | 441 | 9.678 6045 | 541   | 0.321 3955 | 9.955 4682 | 101 | 40 |    |
|    | 30 | 9.634 1168 | 441 | 9.678 6586 | 541   | 0.321 3414 | 9.955 4581 | 100 | 30 |    |
|    | 40 | 9.634 1609 | 441 | 9.678 7128 | 542   | 0.321 2872 | 9.955 4481 | 101 | 20 |    |
|    | 50 | 9.634 2050 | 441 | 9.678 7670 | 542   | 0.321 2330 | 9.955 4380 | 100 | 10 |    |
| 31 | 0  | 9.634 2491 | 441 | 9.678 8211 | 541   | 0.321 1789 | 9.955 4280 | 101 | 0  | 29 |
|    | 10 | 9.634 2932 | 441 | 9.678 8753 | 542   | 0.321 1247 | 9.955 4179 | 100 | 50 |    |
|    | 20 | 9.634 3373 | 441 | 9.678 9295 | 541   | 0.321 0705 | 9.955 4079 | 101 | 40 |    |
|    | 30 | 9.634 3814 | 441 | 9.678 9836 | 541   | 0.321 0164 | 9.955 3978 | 100 | 30 |    |
|    | 40 | 9.634 4255 | 441 | 9.679 0377 | 542   | 0.320 9623 | 9.955 3878 | 101 | 20 |    |
|    | 50 | 9.634 4696 | 441 | 9.679 0919 | 541   | 0.320 9081 | 9.955 3777 | 100 | 10 |    |
| 32 | 0  | 9.634 5137 | 440 | 9.679 1460 | 542   | 0.320 8540 | 9.955 3676 | 100 | 0  | 28 |
|    | 10 | 9.634 5577 | 441 | 9.679 2002 | 541   | 0.320 7998 | 9.955 3576 | 101 | 50 |    |
|    | 20 | 9.634 6018 | 441 | 9.679 2543 | 541   | 0.320 7457 | 9.955 3475 | 100 | 40 |    |
|    | 30 | 9.634 6459 | 440 | 9.679 3084 | 541   | 0.320 6916 | 9.955 3375 | 101 | 30 |    |
|    | 40 | 9.634 6899 | 441 | 9.679 3625 | 541   | 0.320 6375 | 9.955 3274 | 101 | 20 |    |
|    | 50 | 9.634 7340 | 440 | 9.679 4166 | 542   | 0.320 5834 | 9.955 3173 | 100 | 10 |    |
| 33 | 0  | 9.634 7780 | 441 | 9.679 4708 | 541   | 0.320 5292 | 9.955 3073 | 101 | 0  | 27 |
|    | 10 | 9.634 8221 | 440 | 9.679 5249 | 541   | 0.320 4751 | 9.955 2972 | 101 | 50 |    |
|    | 20 | 9.634 8661 | 440 | 9.679 5790 | 541   | 0.320 4210 | 9.955 2871 | 100 | 40 |    |
|    | 30 | 9.634 9101 | 441 | 9.679 6331 | 541   | 0.320 3669 | 9.955 2771 | 101 | 30 |    |
|    | 40 | 9.634 9542 | 440 | 9.679 6872 | 541   | 0.320 3128 | 9.955 2670 | 101 | 20 |    |
|    | 50 | 9.634 9982 | 440 | 9.679 7413 | 540   | 0.320 2587 | 9.955 2569 | 100 | 10 |    |
| 34 | 0  | 9.635 0422 | 440 | 9.679 7953 | 541   | 0.320 2047 | 9.955 2469 | 101 | 0  | 26 |
|    | 10 | 9.635 0862 | 440 | 9.679 8494 | 541   | 0.320 1506 | 9.955 2368 | 101 | 50 |    |
|    | 20 | 9.635 1302 | 440 | 9.679 9035 | 541   | 0.320 0965 | 9.955 2267 | 100 | 40 |    |
|    | 30 | 9.635 1742 | 440 | 9.679 9576 | 540   | 0.320 0424 | 9.955 2166 | 100 | 30 |    |
|    | 40 | 9.635 2182 | 440 | 9.680 0116 | 541   | 0.319 9884 | 9.955 2066 | 101 | 20 |    |
|    | 50 | 9.635 2622 | 440 | 9.680 0657 | 541   | 0.319 9343 | 9.955 1965 | 101 | 10 |    |
| 35 | 0  | 9.635 3062 | 439 | 9.680 1198 | 540   | 0.319 8802 | 9.955 1864 | 101 | 0  | 25 |
|    | 10 | 9.635 3501 | 440 | 9.680 1738 | 541   | 0.319 8262 | 9.955 1763 | 101 | 50 |    |
|    | 20 | 9.635 3941 | 440 | 9.680 2279 | 540   | 0.319 7721 | 9.955 1662 | 100 | 40 |    |
|    | 30 | 9.635 4381 | 440 | 9.680 2819 | 541   | 0.319 7181 | 9.955 1562 | 101 | 30 |    |
|    | 40 | 9.635 4820 | 440 | 9.680 3360 | 540   | 0.319 6640 | 9.955 1461 | 101 | 20 |    |
|    | 50 | 9.635 5260 | 439 | 9.680 3900 | 540   | 0.319 6100 | 9.955 1360 | 101 | 10 |    |
| 36 | 0  | 9.635 5699 | 440 | 9.680 4440 | 541   | 0.319 5560 | 9.955 1259 | 101 | 0  | 24 |
|    | 10 | 9.635 6139 | 439 | 9.680 4981 | 540   | 0.319 5019 | 9.955 1158 | 101 | 50 |    |
|    | 20 | 9.635 6578 | 440 | 9.680 5521 | 540   | 0.319 4479 | 9.955 1057 | 101 | 40 |    |
|    | 30 | 9.635 7018 | 440 | 9.680 6061 | 540   | 0.319 3939 | 9.955 0956 | 101 | 30 |    |
|    | 40 | 9.635 7457 | 439 | 9.680 6601 | 540   | 0.319 3399 | 9.955 0855 | 101 | 20 |    |
|    | 50 | 9.635 7896 | 439 | 9.680 7142 | 540   | 0.319 2858 | 9.955 0754 | 101 | 10 |    |
| 37 | 0  | 9.635 8335 | 439 | 9.680 7682 | 540   | 0.319 2318 | 9.955 0653 | 101 | 0  | 23 |
|    | 10 | 9.635 8774 | 439 | 9.680 8222 | 540   | 0.319 1778 | 9.955 0552 | 100 | 50 |    |
|    | 20 | 9.635 9213 | 439 | 9.680 8762 | 540   | 0.319 1238 | 9.955 0452 | 101 | 40 |    |
|    | 30 | 9.635 9652 | 439 | 9.680 9302 | 540   | 0.319 0698 | 9.955 0351 | 101 | 30 |    |
|    | 40 | 9.636 0091 | 439 | 9.680 9842 | 540   | 0.319 0158 | 9.955 0250 | 101 | 20 |    |
|    | 50 | 9.636 0530 | 439 | 9.681 0382 | 539   | 0.318 9618 | 9.955 0149 | 102 | 10 |    |
| 38 | 0  | 9.636 0969 | 439 | 9.681 0921 | 540   | 0.318 9079 | 9.955 0047 | 101 | 0  | 22 |
|    | 10 | 9.636 1408 | 438 | 9.681 1461 | 540   | 0.318 8539 | 9.954 9946 | 101 | 50 |    |
|    | 20 | 9.636 1846 | 439 | 9.681 2001 | 540   | 0.318 7999 | 9.954 9845 | 101 | 40 |    |
|    | 30 | 9.636 2285 | 439 | 9.681 2541 | 539   | 0.318 7459 | 9.954 9744 | 101 | 30 |    |
|    | 40 | 9.636 2724 | 438 | 9.681 3080 | 540   | 0.318 6920 | 9.954 9643 | 101 | 20 |    |
|    | 50 | 9.636 3162 | 439 | 9.681 3620 | 540   | 0.318 6380 | 9.954 9542 | 101 | 10 |    |
| 39 | 0  | 9.636 3601 | 438 | 9.681 4160 | 539   | 0.318 5840 | 9.954 9441 | 101 | 0  | 21 |
|    | 10 | 9.636 4039 | 439 | 9.681 4699 | 540   | 0.318 5301 | 9.954 9340 | 101 | 50 |    |
|    | 20 | 9.636 4478 | 438 | 9.681 5239 | 539   | 0.318 4761 | 9.954 9239 | 101 | 40 |    |
|    | 30 | 9.636 4916 | 438 | 9.681 5778 | 540   | 0.318 4222 | 9.954 9138 | 101 | 30 |    |
|    | 40 | 9.636 5354 | 438 | 9.681 6318 | 539   | 0.318 3682 | 9.954 9037 | 102 | 20 |    |
|    | 50 | 9.636 5792 | 439 | 9.681 6857 | 539   | 0.318 3143 | 9.954 8935 | 101 | 10 |    |
| 40 | 0  | 9.636 6231 | 439 | 9.681 7396 | 539   | 0.318 2604 | 9.954 8834 | 101 | 0  | 20 |
|    |    | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d.  | "  |    |



|        | "  | Shi        | d.  | Tang       | d. c. | Catg       | Cos        | d.  | "  |    |
|--------|----|------------|-----|------------|-------|------------|------------|-----|----|----|
| 539    | 0  | 9.636 6241 | 418 | 9.681 7396 | 549   | 9.118 2604 | 9.954 8844 | 101 | 0  | 20 |
| 1 51.9 | 10 | 9.636 6669 | 418 | 9.681 7946 | 549   | 9.118 2054 | 9.954 8734 | 101 | 50 |    |
| 1 51.7 | 20 | 9.636 7107 | 418 | 9.681 8495 | 549   | 9.118 1504 | 9.954 8624 | 101 | 40 |    |
| 1 51.6 | 30 | 9.636 7545 | 418 | 9.681 9044 | 549   | 9.118 0954 | 9.954 8514 | 101 | 30 |    |
| 1 51.5 | 40 | 9.636 7983 | 418 | 9.681 9594 | 549   | 9.118 0404 | 9.954 8404 | 101 | 20 |    |
| 1 51.4 | 50 | 9.636 8421 | 418 | 9.681 1043 | 549   | 9.118 0000 | 9.954 8294 | 101 | 10 |    |
| 1 51.3 | 0  | 9.636 8859 | 417 | 9.681 1593 | 549   | 9.117 9450 | 9.954 8184 | 101 | 0  | 19 |
| 1 51.2 | 10 | 9.636 9297 | 418 | 9.681 2142 | 549   | 9.117 8900 | 9.954 8074 | 101 | 50 |    |
| 1 51.1 | 20 | 9.636 9735 | 418 | 9.681 2692 | 549   | 9.117 8350 | 9.954 7964 | 101 | 40 |    |
| 1 51.0 | 30 | 9.637 0173 | 417 | 9.681 3241 | 549   | 9.117 7800 | 9.954 7854 | 101 | 30 |    |
| 1 50.9 | 40 | 9.637 0611 | 418 | 9.681 3791 | 548   | 9.117 7250 | 9.954 7744 | 101 | 20 |    |
| 1 50.8 | 50 | 9.637 1049 | 417 | 9.681 4340 | 549   | 9.117 6700 | 9.954 7634 | 101 | 10 |    |
| 1 50.7 | 0  | 9.637 1487 | 418 | 9.681 4890 | 549   | 9.117 6150 | 9.954 7524 | 101 | 0  | 18 |
| 1 50.6 | 10 | 9.637 1925 | 417 | 9.681 5439 | 549   | 9.117 5600 | 9.954 7414 | 101 | 50 |    |
| 1 50.5 | 20 | 9.637 2363 | 418 | 9.681 5989 | 549   | 9.117 5050 | 9.954 7304 | 101 | 40 |    |
| 1 50.4 | 30 | 9.637 2801 | 417 | 9.681 6538 | 549   | 9.117 4500 | 9.954 7194 | 101 | 30 |    |
| 1 50.3 | 40 | 9.637 3239 | 418 | 9.681 7088 | 549   | 9.117 3950 | 9.954 7084 | 101 | 20 |    |
| 1 50.2 | 50 | 9.637 3677 | 417 | 9.681 7638 | 549   | 9.117 3400 | 9.954 6974 | 101 | 10 |    |
| 1 50.1 | 0  | 9.637 4115 | 418 | 9.681 8187 | 549   | 9.117 2850 | 9.954 6864 | 101 | 0  | 17 |
| 1 50.0 | 10 | 9.637 4553 | 417 | 9.681 8737 | 549   | 9.117 2300 | 9.954 6754 | 101 | 50 |    |
| 1 49.9 | 20 | 9.637 4991 | 418 | 9.681 9287 | 549   | 9.117 1750 | 9.954 6644 | 101 | 40 |    |
| 1 49.8 | 30 | 9.637 5429 | 417 | 9.681 9836 | 549   | 9.117 1200 | 9.954 6534 | 101 | 30 |    |
| 1 49.7 | 40 | 9.637 5867 | 418 | 9.682 0386 | 549   | 9.117 0650 | 9.954 6424 | 101 | 20 |    |
| 1 49.6 | 50 | 9.637 6305 | 417 | 9.682 0936 | 549   | 9.117 0100 | 9.954 6314 | 101 | 10 |    |
| 1 49.5 | 0  | 9.637 6743 | 418 | 9.682 1485 | 549   | 9.116 9550 | 9.954 6204 | 101 | 0  | 16 |
| 1 49.4 | 10 | 9.637 7181 | 417 | 9.682 2035 | 549   | 9.116 9000 | 9.954 6094 | 101 | 50 |    |
| 1 49.3 | 20 | 9.637 7619 | 418 | 9.682 2585 | 549   | 9.116 8450 | 9.954 5984 | 101 | 40 |    |
| 1 49.2 | 30 | 9.637 8057 | 417 | 9.682 3135 | 549   | 9.116 7900 | 9.954 5874 | 101 | 30 |    |
| 1 49.1 | 40 | 9.637 8495 | 418 | 9.682 3684 | 549   | 9.116 7350 | 9.954 5764 | 101 | 20 |    |
| 1 49.0 | 50 | 9.637 8933 | 417 | 9.682 4234 | 549   | 9.116 6800 | 9.954 5654 | 101 | 10 |    |
| 1 48.9 | 0  | 9.637 9371 | 418 | 9.682 4784 | 549   | 9.116 6250 | 9.954 5544 | 101 | 0  | 15 |
| 1 48.8 | 10 | 9.637 9809 | 417 | 9.682 5333 | 549   | 9.116 5700 | 9.954 5434 | 101 | 50 |    |
| 1 48.7 | 20 | 9.638 0247 | 418 | 9.682 5883 | 549   | 9.116 5150 | 9.954 5324 | 101 | 40 |    |
| 1 48.6 | 30 | 9.638 0685 | 417 | 9.682 6433 | 549   | 9.116 4600 | 9.954 5214 | 101 | 30 |    |
| 1 48.5 | 40 | 9.638 1123 | 418 | 9.682 6983 | 549   | 9.116 4050 | 9.954 5104 | 101 | 20 |    |
| 1 48.4 | 50 | 9.638 1561 | 417 | 9.682 7533 | 549   | 9.116 3500 | 9.954 5000 | 101 | 10 |    |
| 1 48.3 | 0  | 9.638 1999 | 418 | 9.682 8083 | 549   | 9.116 2950 | 9.954 4890 | 101 | 0  | 14 |
| 1 48.2 | 10 | 9.638 2437 | 417 | 9.682 8633 | 549   | 9.116 2400 | 9.954 4780 | 101 | 50 |    |
| 1 48.1 | 20 | 9.638 2875 | 418 | 9.682 9183 | 549   | 9.116 1850 | 9.954 4670 | 101 | 40 |    |
| 1 48.0 | 30 | 9.638 3313 | 417 | 9.682 9733 | 549   | 9.116 1300 | 9.954 4560 | 101 | 30 |    |
| 1 47.9 | 40 | 9.638 3751 | 418 | 9.683 0283 | 549   | 9.116 0750 | 9.954 4450 | 101 | 20 |    |
| 1 47.8 | 50 | 9.638 4189 | 417 | 9.683 0833 | 549   | 9.116 0200 | 9.954 4340 | 101 | 10 |    |
| 1 47.7 | 0  | 9.638 4627 | 418 | 9.683 1383 | 549   | 9.115 9650 | 9.954 4230 | 101 | 0  | 13 |
| 1 47.6 | 10 | 9.638 5065 | 417 | 9.683 1933 | 549   | 9.115 9100 | 9.954 4120 | 101 | 50 |    |
| 1 47.5 | 20 | 9.638 5503 | 418 | 9.683 2483 | 549   | 9.115 8550 | 9.954 4010 | 101 | 40 |    |
| 1 47.4 | 30 | 9.638 5941 | 417 | 9.683 3033 | 549   | 9.115 8000 | 9.954 3900 | 101 | 30 |    |
| 1 47.3 | 40 | 9.638 6379 | 418 | 9.683 3583 | 549   | 9.115 7450 | 9.954 3790 | 101 | 20 |    |
| 1 47.2 | 50 | 9.638 6817 | 417 | 9.683 4133 | 549   | 9.115 6900 | 9.954 3680 | 101 | 10 |    |
| 1 47.1 | 0  | 9.638 7255 | 418 | 9.683 4683 | 549   | 9.115 6350 | 9.954 3570 | 101 | 0  | 12 |
| 1 47.0 | 10 | 9.638 7693 | 417 | 9.683 5233 | 549   | 9.115 5800 | 9.954 3460 | 101 | 50 |    |
| 1 46.9 | 20 | 9.638 8131 | 418 | 9.683 5783 | 549   | 9.115 5250 | 9.954 3350 | 101 | 40 |    |
| 1 46.8 | 30 | 9.638 8569 | 417 | 9.683 6333 | 549   | 9.115 4700 | 9.954 3240 | 101 | 30 |    |
| 1 46.7 | 40 | 9.638 9007 | 418 | 9.683 6883 | 549   | 9.115 4150 | 9.954 3130 | 101 | 20 |    |
| 1 46.6 | 50 | 9.638 9445 | 417 | 9.683 7433 | 549   | 9.115 3600 | 9.954 3020 | 101 | 10 |    |
| 1 46.5 | 0  | 9.638 9883 | 418 | 9.683 7983 | 549   | 9.115 3050 | 9.954 2910 | 101 | 0  | 11 |
| 1 46.4 | 10 | 9.639 0321 | 417 | 9.683 8533 | 549   | 9.115 2500 | 9.954 2800 | 101 | 50 |    |
| 1 46.3 | 20 | 9.639 0759 | 418 | 9.683 9083 | 549   | 9.115 1950 | 9.954 2690 | 101 | 40 |    |
| 1 46.2 | 30 | 9.639 1197 | 417 | 9.683 9633 | 549   | 9.115 1400 | 9.954 2580 | 101 | 30 |    |
| 1 46.1 | 40 | 9.639 1635 | 418 | 9.684 0183 | 549   | 9.115 0850 | 9.954 2470 | 101 | 20 |    |
| 1 46.0 | 50 | 9.639 2073 | 417 | 9.684 0733 | 549   | 9.115 0300 | 9.954 2360 | 101 | 10 |    |
| 1 45.9 | 0  | 9.639 2511 | 418 | 9.684 1283 | 549   | 9.114 9750 | 9.954 2250 | 101 | 0  | 10 |
| 1 45.8 | 10 | 9.639 2949 | 417 | 9.684 1833 | 549   | 9.114 9200 | 9.954 2140 | 101 | 50 |    |
| 1 45.7 | 20 | 9.639 3387 | 418 | 9.684 2383 | 549   | 9.114 8650 | 9.954 2030 | 101 | 40 |    |
| 1 45.6 | 30 | 9.639 3825 | 417 | 9.684 2933 | 549   | 9.114 8100 | 9.954 1920 | 101 | 30 |    |
| 1 45.5 | 40 | 9.639 4263 | 418 | 9.684 3483 | 549   | 9.114 7550 | 9.954 1810 | 101 | 20 |    |
| 1 45.4 | 50 | 9.639 4701 | 417 | 9.684 4033 | 549   | 9.114 7000 | 9.954 1700 | 101 | 10 |    |
| 1 45.3 | 0  | 9.639 5139 | 418 | 9.684 4583 | 549   | 9.114 6450 | 9.954 1590 | 101 | 0  | 9  |
| 1 45.2 | 10 | 9.639 5577 | 417 | 9.684 5133 | 549   | 9.114 5900 | 9.954 1480 | 101 | 50 |    |
| 1 45.1 | 20 | 9.639 6015 | 418 | 9.684 5683 | 549   | 9.114 5350 | 9.954 1370 | 101 | 40 |    |
| 1 45.0 | 30 | 9.639 6453 | 417 | 9.684 6233 | 549   | 9.114 4800 | 9.954 1260 | 101 | 30 |    |
| 1 44.9 | 40 | 9.639 6891 | 418 | 9.684 6783 | 549   | 9.114 4250 | 9.954 1150 | 101 | 20 |    |
| 1 44.8 | 50 | 9.639 7329 | 417 | 9.684 7333 | 549   | 9.114 3700 | 9.954 1040 | 101 | 10 |    |
| 1 44.7 | 0  | 9.639 7767 | 418 | 9.684 7883 | 549   | 9.114 3150 | 9.954 0930 | 101 | 0  | 8  |
| 1 44.6 | 10 | 9.639 8205 | 417 | 9.684 8433 | 549   | 9.114 2600 | 9.954 0820 | 101 | 50 |    |
| 1 44.5 | 20 | 9.639 8643 | 418 | 9.684 8983 | 549   | 9.114 2050 | 9.954 0710 | 101 | 40 |    |
| 1 44.4 | 30 | 9.639 9081 | 417 | 9.684 9533 | 549   | 9.114 1500 | 9.954 0600 | 101 | 30 |    |
| 1 44.3 | 40 | 9.639 9519 | 418 | 9.685 0083 | 549   | 9.114 0950 | 9.954 0490 | 101 | 20 |    |
| 1 44.2 | 50 | 9.639 9957 | 417 | 9.685 0633 | 549   | 9.114 0400 | 9.954 0380 | 101 | 10 |    |
| 1 44.1 | 0  | 9.640 0395 | 418 | 9.685 1183 | 549   | 9.113 9850 | 9.954 0270 | 101 | 0  | 7  |
| 1 44.0 | 10 | 9.640 0833 | 417 | 9.685 1733 | 549   | 9.113 9300 | 9.954 0160 | 101 | 50 |    |
| 1 43.9 | 20 | 9.640 1271 | 418 | 9.685 2283 | 549   | 9.113 8750 | 9.954 0050 | 101 | 40 |    |
| 1 43.8 | 30 | 9.640 1709 | 417 | 9.685 2833 | 549   | 9.113 8200 | 9.953 9940 | 101 | 30 |    |
| 1 43.7 | 40 | 9.640 2147 | 418 | 9.685 3383 | 549   | 9.113 7650 | 9.953 9830 | 101 | 20 |    |
| 1 43.6 | 50 | 9.640 2585 | 417 | 9.685 3933 | 549   | 9.113 7100 | 9.953 9720 | 101 | 10 |    |
| 1 43.5 | 0  | 9.640 3023 | 418 | 9.685 4483 | 549   | 9.113 6550 | 9.953 9610 | 101 | 0  | 6  |
| 1 43.4 | 10 | 9.640 3461 | 417 | 9.685 5033 | 549   | 9.113 6000 | 9.953 9500 | 101 | 50 |    |
| 1 43.3 | 20 | 9.640 3899 | 418 | 9.685 5583 | 549   | 9.113 5450 | 9.953 9390 | 101 | 40 |    |
| 1 43.2 | 30 | 9.640 4337 | 417 | 9.685 6133 | 549   | 9.113 4900 | 9.953 9280 | 101 | 30 |    |
| 1 43.1 | 40 | 9.640 4775 | 418 | 9.685 6683 | 549   | 9.113 4350 | 9.953 9170 | 101 | 20 |    |
| 1 43.0 | 50 | 9.640 5213 | 417 | 9.685 7233 | 549   | 9.113 3800 | 9.953 9060 | 101 | 10 |    |
| 1 42.9 | 0  | 9.640 5651 | 418 | 9.685 7783 | 549   | 9.113 3250 | 9.953 8950 | 101 | 0  | 5  |
| 1 42.8 | 10 | 9.640 6089 | 417 | 9.685 8333 | 549   | 9.113 2700 | 9.953 8840 | 101 | 50 |    |
| 1 42.7 | 20 | 9.640 6527 | 418 | 9.685 8883 | 549   | 9.113 2150 | 9.953 8730 | 101 | 40 |    |
| 1 42.6 | 30 | 9.640 6965 | 417 | 9.685 9433 | 549   | 9.113 1600 | 9.953 8620 | 101 | 30 |    |
| 1 42.5 | 40 | 9.640 7403 | 418 | 9.686 0000 | 549   | 9.113 1050 | 9.953 8510 | 101 | 20 |    |
| 1 42.4 | 50 | 9.640 7841 | 417 | 9.686 0550 | 549   | 9.113 0500 | 9.953 8400 | 101 | 10 |    |
| 1 42.3 | 0  | 9.640 8279 | 418 | 9.686 1100 | 549   | 9.112 9950 | 9.953 8290 | 101 | 0  | 4  |
| 1 42.2 | 10 | 9.640 8717 | 417 | 9.686 1650 | 549   | 9.112 9400 | 9.953 8180 | 101 | 50 |    |
| 1 42.1 | 20 | 9.640 9155 | 418 | 9.686 2200 | 549   | 9.112 8850 | 9.953 8070 | 101 | 40 |    |
| 1 42.0 | 30 | 9.640 9593 | 417 | 9.686 2750 | 549   | 9.112 8300 | 9.953 7960 | 101 | 30 |    |
| 1 41.9 | 40 | 9.641 0031 | 418 | 9.686 3300 | 549   | 9.112 7750 | 9.953 7850 | 101 | 20 |    |
| 1 41.8 | 50 | 9.641 0469 | 417 | 9.686 3850 | 549   | 9.112 7200 | 9.953 7740 | 101 | 10 |    |
| 1 41.7 | 0  | 9.641 0907 | 418 | 9.686 4400 | 549   | 9.112 6650 | 9.953 7630 | 101 | 0  | 3  |
| 1 41.6 | 10 | 9.641 1345 | 417 | 9.686 4950 | 549   | 9.112 6100 | 9.953 7520 | 101 | 50 |    |
| 1 41.5 | 20 | 9.641 1783 | 418 | 9.686 5500 | 549   | 9.112 5550 | 9.953 7410 | 101 | 40 |    |
| 1 41.4 | 30 | 9.         |     |            |       |            |            |     |    |    |



|    | "  | Sh         | d.  | Tang       | d. c. | Cotg       | Cos        | d.  | "  |    |
|----|----|------------|-----|------------|-------|------------|------------|-----|----|----|
| 50 | 0  | 9.639 2422 | 435 | 9.684 9681 | 537   | 0.315 0319 | 9.954 2741 | 102 | 0  | 10 |
|    | 10 | 9.639 2857 | 435 | 9.685 0218 | 537   | 0.314 9782 | 9.954 2639 | 102 | 50 |    |
|    | 20 | 9.639 3292 | 435 | 9.685 0755 | 536   | 0.314 9245 | 9.954 2537 | 102 | 40 |    |
|    | 30 | 9.639 3726 | 434 | 9.685 1291 | 536   | 0.314 8709 | 9.954 2435 | 102 | 30 |    |
|    | 40 | 9.639 4161 | 435 | 9.685 1828 | 537   | 0.314 8172 | 9.954 2333 | 102 | 20 |    |
|    | 50 | 9.639 4596 | 435 | 9.685 2365 | 537   | 0.314 7635 | 9.954 2231 | 102 | 10 |    |
| 51 | 0  | 9.639 5030 | 434 | 9.685 2901 | 536   | 0.314 7099 | 9.954 2129 | 102 | 0  | 9  |
|    | 10 | 9.639 5465 | 435 | 9.685 3438 | 537   | 0.314 6562 | 9.954 2027 | 102 | 50 |    |
|    | 20 | 9.639 5899 | 434 | 9.685 3975 | 537   | 0.314 6025 | 9.954 1925 | 102 | 40 |    |
|    | 30 | 9.639 6334 | 435 | 9.685 4511 | 536   | 0.314 5489 | 9.954 1823 | 102 | 30 |    |
|    | 40 | 9.639 6768 | 434 | 9.685 5047 | 536   | 0.314 4953 | 9.954 1721 | 102 | 20 |    |
|    | 50 | 9.639 7203 | 435 | 9.685 5584 | 537   | 0.314 4416 | 9.954 1619 | 102 | 10 |    |
| 52 | 0  | 9.639 7637 | 434 | 9.685 6120 | 536   | 0.314 3880 | 9.954 1517 | 102 | 0  | 8  |
|    | 10 | 9.639 8071 | 434 | 9.685 6657 | 537   | 0.314 3343 | 9.954 1414 | 102 | 50 |    |
|    | 20 | 9.639 8505 | 434 | 9.685 7193 | 536   | 0.314 2807 | 9.954 1312 | 102 | 40 |    |
|    | 30 | 9.639 8939 | 434 | 9.685 7729 | 536   | 0.314 2271 | 9.954 1210 | 102 | 30 |    |
|    | 40 | 9.639 9373 | 434 | 9.685 8265 | 536   | 0.314 1735 | 9.954 1108 | 102 | 20 |    |
|    | 50 | 9.639 9807 | 434 | 9.685 8801 | 537   | 0.314 1199 | 9.954 1006 | 102 | 10 |    |
| 53 | 0  | 9.640 0241 | 434 | 9.685 9338 | 537   | 0.314 0662 | 9.954 0904 | 102 | 0  | 7  |
|    | 10 | 9.640 0675 | 434 | 9.685 9874 | 536   | 0.314 0126 | 9.954 0802 | 103 | 50 |    |
|    | 20 | 9.640 1109 | 434 | 9.686 0410 | 536   | 0.313 9590 | 9.954 0699 | 102 | 40 |    |
|    | 30 | 9.640 1543 | 434 | 9.686 0946 | 536   | 0.313 9054 | 9.954 0597 | 102 | 30 |    |
|    | 40 | 9.640 1977 | 434 | 9.686 1482 | 536   | 0.313 8518 | 9.954 0495 | 102 | 20 |    |
|    | 50 | 9.640 2410 | 433 | 9.686 2018 | 536   | 0.313 7982 | 9.954 0393 | 102 | 10 |    |
| 54 | 0  | 9.640 2844 | 434 | 9.686 2553 | 535   | 0.313 7447 | 9.954 0291 | 103 | 0  | 6  |
|    | 10 | 9.640 3278 | 434 | 9.686 3089 | 536   | 0.313 6911 | 9.954 0188 | 102 | 50 |    |
|    | 20 | 9.640 3711 | 433 | 9.686 3625 | 536   | 0.313 6375 | 9.954 0086 | 102 | 40 |    |
|    | 30 | 9.640 4145 | 434 | 9.686 4161 | 536   | 0.313 5839 | 9.953 9984 | 102 | 30 |    |
|    | 40 | 9.640 4578 | 433 | 9.686 4697 | 536   | 0.313 5303 | 9.953 9882 | 103 | 20 |    |
|    | 50 | 9.640 5011 | 433 | 9.686 5232 | 535   | 0.313 4768 | 9.953 9779 | 102 | 10 |    |
| 55 | 0  | 9.640 5445 | 433 | 9.686 5768 | 535   | 0.313 4232 | 9.953 9677 | 102 | 0  | 5  |
|    | 10 | 9.640 5878 | 433 | 9.686 6303 | 536   | 0.313 3697 | 9.953 9575 | 103 | 50 |    |
|    | 20 | 9.640 6311 | 433 | 9.686 6839 | 535   | 0.313 3161 | 9.953 9472 | 102 | 40 |    |
|    | 30 | 9.640 6744 | 433 | 9.686 7374 | 536   | 0.313 2626 | 9.953 9370 | 102 | 30 |    |
|    | 40 | 9.640 7178 | 434 | 9.686 7910 | 535   | 0.313 2090 | 9.953 9268 | 102 | 20 |    |
|    | 50 | 9.640 7611 | 433 | 9.686 8445 | 535   | 0.313 1555 | 9.953 9165 | 103 | 10 |    |
| 56 | 0  | 9.640 8044 | 433 | 9.686 8981 | 535   | 0.313 1019 | 9.953 9063 | 103 | 0  | 4  |
|    | 10 | 9.640 8477 | 433 | 9.686 9516 | 535   | 0.313 0484 | 9.953 8960 | 102 | 50 |    |
|    | 20 | 9.640 8909 | 432 | 9.687 0051 | 535   | 0.312 9949 | 9.953 8858 | 102 | 40 |    |
|    | 30 | 9.640 9342 | 433 | 9.687 0587 | 536   | 0.312 9413 | 9.953 8756 | 103 | 30 |    |
|    | 40 | 9.640 9775 | 433 | 9.687 1122 | 535   | 0.312 8878 | 9.953 8653 | 102 | 20 |    |
|    | 50 | 9.641 0208 | 433 | 9.687 1657 | 535   | 0.312 8343 | 9.953 8551 | 102 | 10 |    |
| 57 | 0  | 9.641 0640 | 432 | 9.687 2192 | 535   | 0.312 7808 | 9.953 8448 | 102 | 0  | 3  |
|    | 10 | 9.641 1073 | 433 | 9.687 2727 | 535   | 0.312 7273 | 9.953 8346 | 103 | 50 |    |
|    | 20 | 9.641 1506 | 433 | 9.687 3262 | 535   | 0.312 6738 | 9.953 8243 | 102 | 40 |    |
|    | 30 | 9.641 1938 | 432 | 9.687 3797 | 535   | 0.312 6203 | 9.953 8141 | 103 | 30 |    |
|    | 40 | 9.641 2371 | 433 | 9.687 4332 | 535   | 0.312 5668 | 9.953 8038 | 102 | 20 |    |
|    | 50 | 9.641 2803 | 432 | 9.687 4867 | 535   | 0.312 5133 | 9.953 7936 | 103 | 10 |    |
| 58 | 0  | 9.641 3235 | 433 | 9.687 5402 | 535   | 0.312 4598 | 9.953 7833 | 102 | 0  | 2  |
|    | 10 | 9.641 3668 | 432 | 9.687 5937 | 535   | 0.312 4063 | 9.953 7731 | 103 | 50 |    |
|    | 20 | 9.641 4100 | 432 | 9.687 6472 | 535   | 0.312 3528 | 9.953 7628 | 102 | 40 |    |
|    | 30 | 9.641 4532 | 432 | 9.687 7007 | 534   | 0.312 2993 | 9.953 7526 | 103 | 30 |    |
|    | 40 | 9.641 4964 | 432 | 9.687 7541 | 535   | 0.312 2459 | 9.953 7423 | 103 | 20 |    |
|    | 50 | 9.641 5396 | 432 | 9.687 8076 | 535   | 0.312 1924 | 9.953 7320 | 102 | 10 |    |
| 59 | 0  | 9.641 5828 | 432 | 9.687 8611 | 534   | 0.312 1389 | 9.953 7218 | 103 | 0  | 1  |
|    | 10 | 9.641 6260 | 432 | 9.687 9145 | 535   | 0.312 0855 | 9.953 7115 | 102 | 50 |    |
|    | 20 | 9.641 6692 | 432 | 9.687 9680 | 534   | 0.312 0320 | 9.953 7013 | 103 | 40 |    |
|    | 30 | 9.641 7124 | 432 | 9.688 0214 | 535   | 0.311 9786 | 9.953 6910 | 103 | 30 |    |
|    | 40 | 9.641 7556 | 432 | 9.688 0749 | 534   | 0.311 9251 | 9.953 6807 | 102 | 20 |    |
|    | 50 | 9.641 7988 | 432 | 9.688 1283 | 535   | 0.311 8717 | 9.953 6705 | 103 | 10 |    |
| 60 | 0  | 9.641 8420 | 432 | 9.688 1818 | 535   | 0.311 8182 | 9.953 6602 | 103 | 0  | 0  |
|    | "  | Cos        | d.  | Cotg       | d. c. | Tang       | Sh         | d.  | "  |    |

587

1 53.7

2 107.4

3 161.1

4 214.8

5 268.5

6 322.2

7 375.9

8 429.6

9 483.3

586

1 53.6

2 107.2

3 160.8

4 214.4

5 268.0

6 321.6

7 375.2

8 428.8

9 482.4

585

1 53.5

2 107.0

3 160.7

4 214.3

5 267.5

6 321.0

7 374.5

8 428.0

9 481.5

484

1 43.4

2 86.8

3 130.2

4 173.6

5 217.0

6 260.4

7 303.8

8 347.2

9 390.6

483

1 43.3

2 86.6

3 129.9

4 173.2

5 216.5

6 259.8

7 303.1

8 346.4

9 389.7

103

1 10.3

2 20.6

3 30.9

4 41.2

5 51.5

6 61.8

7 72.1

8 82.4

9 92.7



|    |    | Sin        | d.  | Tang.      | d. c. | Cotg.      | Con        | d.  |    |    |
|----|----|------------|-----|------------|-------|------------|------------|-----|----|----|
| 0  | 0  | 9.641 8420 | 431 | 9.688 1811 | 531   | 0.111 8112 | 9.983 1663 | 103 | 0  | 60 |
| 1  | 10 | 9.641 8851 | 432 | 9.688 2151 | 532   | 0.111 7915 | 9.983 6499 | 103 | 30 |    |
| 2  | 20 | 9.641 9283 | 433 | 9.688 2496 | 533   | 0.111 7717 | 9.983 6396 | 103 | 40 |    |
| 3  | 30 | 9.641 9714 | 434 | 9.688 2844 | 534   | 0.111 6679 | 9.983 6293 | 103 | 30 |    |
| 4  | 40 | 9.642 0149 | 435 | 9.688 3195 | 535   | 0.111 6478 | 9.983 6191 | 103 | 20 |    |
| 5  | 50 | 9.642 0577 | 436 | 9.688 3549 | 536   | 0.111 6274 | 9.983 6088 | 103 | 10 |    |
| 6  | 0  | 9.642 1009 | 437 | 9.688 3904 | 537   | 0.111 6072 | 9.983 5985 | 103 | 0  | 59 |
| 7  | 10 | 9.642 1440 | 438 | 9.688 4257 | 538   | 0.111 5871 | 9.983 5881 | 103 | 50 |    |
| 8  | 20 | 9.642 1871 | 439 | 9.688 4612 | 539   | 0.111 5670 | 9.983 5778 | 103 | 40 |    |
| 9  | 30 | 9.642 2301 | 440 | 9.688 4966 | 540   | 0.111 5471 | 9.983 5674 | 103 | 30 |    |
| 10 | 40 | 9.642 2734 | 441 | 9.688 5321 | 541   | 0.111 5272 | 9.983 5571 | 103 | 20 |    |
| 11 | 50 | 9.642 3166 | 442 | 9.688 5677 | 542   | 0.111 5074 | 9.983 5468 | 103 | 10 |    |
| 12 | 0  | 9.642 3599 | 443 | 9.688 6032 | 543   | 0.111 4877 | 9.983 5364 | 103 | 0  | 58 |
| 13 | 10 | 9.642 4031 | 444 | 9.688 6388 | 544   | 0.111 4681 | 9.983 5260 | 103 | 50 |    |
| 14 | 20 | 9.642 4463 | 445 | 9.688 6745 | 545   | 0.111 4486 | 9.983 5156 | 103 | 40 |    |
| 15 | 30 | 9.642 4895 | 446 | 9.688 7102 | 546   | 0.111 4292 | 9.983 5052 | 103 | 30 |    |
| 16 | 40 | 9.642 5327 | 447 | 9.688 7460 | 547   | 0.111 4099 | 9.983 4948 | 103 | 20 |    |
| 17 | 50 | 9.642 5759 | 448 | 9.688 7817 | 548   | 0.111 3907 | 9.983 4844 | 103 | 10 |    |
| 18 | 0  | 9.642 6191 | 449 | 9.688 8175 | 549   | 0.111 3715 | 9.983 4740 | 103 | 0  | 57 |
| 19 | 10 | 9.642 6623 | 450 | 9.688 8532 | 550   | 0.111 3524 | 9.983 4636 | 103 | 50 |    |
| 20 | 20 | 9.642 7055 | 451 | 9.688 8890 | 551   | 0.111 3334 | 9.983 4532 | 103 | 40 |    |
| 21 | 30 | 9.642 7487 | 452 | 9.688 9248 | 552   | 0.111 3144 | 9.983 4428 | 103 | 30 |    |
| 22 | 40 | 9.642 7919 | 453 | 9.688 9606 | 553   | 0.111 2955 | 9.983 4324 | 103 | 20 |    |
| 23 | 50 | 9.642 8351 | 454 | 9.688 9964 | 554   | 0.111 2766 | 9.983 4220 | 103 | 10 |    |
| 24 | 0  | 9.642 8783 | 455 | 9.689 0322 | 555   | 0.111 2578 | 9.983 4116 | 103 | 0  | 56 |
| 25 | 10 | 9.642 9215 | 456 | 9.689 0680 | 556   | 0.111 2390 | 9.983 4012 | 103 | 50 |    |
| 26 | 20 | 9.642 9647 | 457 | 9.689 1038 | 557   | 0.111 2203 | 9.983 3908 | 103 | 40 |    |
| 27 | 30 | 9.642 0079 | 458 | 9.689 1396 | 558   | 0.111 2017 | 9.983 3804 | 103 | 30 |    |
| 28 | 40 | 9.642 0511 | 459 | 9.689 1754 | 559   | 0.111 1831 | 9.983 3700 | 103 | 20 |    |
| 29 | 50 | 9.642 0943 | 460 | 9.689 2112 | 560   | 0.111 1646 | 9.983 3596 | 103 | 10 |    |
| 30 | 0  | 9.642 1375 | 461 | 9.689 2470 | 561   | 0.111 1461 | 9.983 3492 | 103 | 0  | 55 |
| 31 | 10 | 9.642 1807 | 462 | 9.689 2828 | 562   | 0.111 1277 | 9.983 3388 | 103 | 50 |    |
| 32 | 20 | 9.642 2239 | 463 | 9.689 3186 | 563   | 0.111 1094 | 9.983 3284 | 103 | 40 |    |
| 33 | 30 | 9.642 2671 | 464 | 9.689 3544 | 564   | 0.111 0912 | 9.983 3180 | 103 | 30 |    |
| 34 | 40 | 9.642 3103 | 465 | 9.689 3902 | 565   | 0.111 0730 | 9.983 3076 | 103 | 20 | </ |



|    | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d.  | "  |    |
|----|----|------------|-----|------------|-------|------------|------------|-----|----|----|
| 10 | 0  | 9.644 4226 | 429 | 9.691 3809 | 532   | 0.308 6191 | 9.953 0418 | 104 | 0  | 50 |
|    | 10 | 9.644 4655 | 428 | 9.691 4341 | 531   | 0.308 5659 | 9.953 0314 | 103 | 50 |    |
|    | 20 | 9.644 5083 | 428 | 9.691 4872 | 532   | 0.308 5128 | 9.953 0211 | 104 | 40 |    |
|    | 30 | 9.644 5511 | 429 | 9.691 5404 | 532   | 0.308 4596 | 9.953 0107 | 103 | 30 |    |
|    | 40 | 9.644 5940 | 428 | 9.691 5936 | 532   | 0.308 4064 | 9.953 0004 | 104 | 20 |    |
|    | 50 | 9.644 6368 | 428 | 9.691 6468 | 532   | 0.308 3532 | 9.952 9900 | 103 | 10 |    |
| 11 | 0  | 9.644 6796 | 429 | 9.691 7000 | 531   | 0.308 3000 | 9.952 9797 | 104 | 0  | 49 |
|    | 10 | 9.644 7225 | 428 | 9.691 7531 | 532   | 0.308 2469 | 9.952 9693 | 104 | 50 |    |
|    | 20 | 9.644 7653 | 428 | 9.691 8063 | 532   | 0.308 1937 | 9.952 9589 | 103 | 40 |    |
|    | 30 | 9.644 8081 | 428 | 9.691 8595 | 531   | 0.308 1405 | 9.952 9486 | 104 | 30 |    |
|    | 40 | 9.644 8509 | 428 | 9.691 9126 | 532   | 0.308 0874 | 9.952 9382 | 103 | 20 |    |
|    | 50 | 9.644 8937 | 428 | 9.691 9658 | 531   | 0.308 0342 | 9.952 9279 | 104 | 10 |    |
| 12 | 0  | 9.644 9365 | 428 | 9.692 0189 | 532   | 0.307 9811 | 9.952 9175 | 103 | 0  | 48 |
|    | 10 | 9.644 9793 | 427 | 9.692 0721 | 531   | 0.307 9279 | 9.952 9072 | 104 | 50 |    |
|    | 20 | 9.645 0220 | 428 | 9.692 1252 | 532   | 0.307 8748 | 9.952 8968 | 104 | 40 |    |
|    | 30 | 9.645 0648 | 428 | 9.692 1784 | 531   | 0.307 8216 | 9.952 8864 | 103 | 30 |    |
|    | 40 | 9.645 1076 | 427 | 9.692 2315 | 531   | 0.307 7685 | 9.952 8761 | 104 | 20 |    |
|    | 50 | 9.645 1503 | 428 | 9.692 2846 | 532   | 0.307 7154 | 9.952 8657 | 104 | 10 |    |
| 13 | 0  | 9.645 1931 | 428 | 9.692 3378 | 531   | 0.307 6622 | 9.952 8553 | 103 | 0  | 47 |
|    | 10 | 9.645 2359 | 427 | 9.692 3909 | 531   | 0.307 6091 | 9.952 8450 | 104 | 50 |    |
|    | 20 | 9.645 2786 | 428 | 9.692 4440 | 531   | 0.307 5560 | 9.952 8346 | 104 | 40 |    |
|    | 30 | 9.645 3214 | 427 | 9.692 4971 | 532   | 0.307 5029 | 9.952 8242 | 103 | 30 |    |
|    | 40 | 9.645 3641 | 427 | 9.692 5503 | 531   | 0.307 4497 | 9.952 8139 | 104 | 20 |    |
|    | 50 | 9.645 4068 | 428 | 9.692 6034 | 531   | 0.307 3966 | 9.952 8035 | 104 | 10 |    |
| 14 | 0  | 9.645 4496 | 427 | 9.692 6565 | 531   | 0.307 3435 | 9.952 7931 | 104 | 0  | 46 |
|    | 10 | 9.645 4923 | 427 | 9.692 7096 | 531   | 0.307 2904 | 9.952 7827 | 104 | 50 |    |
|    | 20 | 9.645 5350 | 427 | 9.692 7627 | 531   | 0.307 2373 | 9.952 7723 | 103 | 40 |    |
|    | 30 | 9.645 5777 | 427 | 9.692 8158 | 530   | 0.307 1842 | 9.952 7620 | 104 | 30 |    |
|    | 40 | 9.645 6204 | 427 | 9.692 8688 | 531   | 0.307 1312 | 9.952 7516 | 104 | 20 |    |
|    | 50 | 9.645 6631 | 427 | 9.692 9219 | 531   | 0.307 0781 | 9.952 7412 | 104 | 10 |    |
| 15 | 0  | 9.645 7058 | 427 | 9.692 9750 | 531   | 0.307 0250 | 9.952 7308 | 104 | 0  | 45 |
|    | 10 | 9.645 7485 | 427 | 9.693 0281 | 531   | 0.306 9719 | 9.952 7204 | 103 | 50 |    |
|    | 20 | 9.645 7912 | 427 | 9.693 0812 | 530   | 0.306 9188 | 9.952 7101 | 104 | 40 |    |
|    | 30 | 9.645 8339 | 427 | 9.693 1342 | 531   | 0.306 8658 | 9.952 6997 | 104 | 30 |    |
|    | 40 | 9.645 8766 | 426 | 9.693 1873 | 531   | 0.306 8127 | 9.952 6893 | 104 | 20 |    |
|    | 50 | 9.645 9192 | 427 | 9.693 2404 | 530   | 0.306 7596 | 9.952 6789 | 104 | 10 |    |
| 16 | 0  | 9.645 9619 | 427 | 9.693 2934 | 531   | 0.306 7066 | 9.952 6685 | 104 | 0  | 44 |
|    | 10 | 9.646 0046 | 426 | 9.693 3465 | 530   | 0.306 6535 | 9.952 6581 | 104 | 50 |    |
|    | 20 | 9.646 0472 | 427 | 9.693 3995 | 531   | 0.306 6005 | 9.952 6477 | 104 | 40 |    |
|    | 30 | 9.646 0899 | 426 | 9.693 4526 | 530   | 0.306 5474 | 9.952 6373 | 104 | 30 |    |
|    | 40 | 9.646 1325 | 427 | 9.693 5056 | 530   | 0.306 4944 | 9.952 6269 | 104 | 20 |    |
|    | 50 | 9.646 1752 | 426 | 9.693 5586 | 531   | 0.306 4414 | 9.952 6165 | 104 | 10 |    |
| 17 | 0  | 9.646 2178 | 426 | 9.693 6117 | 530   | 0.306 3883 | 9.952 6061 | 104 | 0  | 43 |
|    | 10 | 9.646 2604 | 427 | 9.693 6647 | 530   | 0.306 3353 | 9.952 5957 | 104 | 50 |    |
|    | 20 | 9.646 3031 | 426 | 9.693 7177 | 531   | 0.306 2823 | 9.952 5853 | 104 | 40 |    |
|    | 30 | 9.646 3457 | 426 | 9.693 7708 | 530   | 0.306 2292 | 9.952 5749 | 104 | 30 |    |
|    | 40 | 9.646 3883 | 426 | 9.693 8238 | 530   | 0.306 1762 | 9.952 5645 | 104 | 20 |    |
|    | 50 | 9.646 4309 | 426 | 9.693 8768 | 530   | 0.306 1232 | 9.952 5541 | 104 | 10 |    |
| 18 | 0  | 9.646 4735 | 426 | 9.693 9298 | 530   | 0.306 0702 | 9.952 5437 | 104 | 0  | 42 |
|    | 10 | 9.646 5161 | 426 | 9.693 9828 | 530   | 0.306 0172 | 9.952 5333 | 104 | 50 |    |
|    | 20 | 9.646 5587 | 426 | 9.694 0358 | 530   | 0.305 9642 | 9.952 5229 | 104 | 40 |    |
|    | 30 | 9.646 6013 | 426 | 9.694 0888 | 530   | 0.305 9112 | 9.952 5125 | 104 | 30 |    |
|    | 40 | 9.646 6439 | 426 | 9.694 1418 | 530   | 0.305 8582 | 9.952 5021 | 104 | 20 |    |
|    | 50 | 9.646 6865 | 425 | 9.694 1948 | 530   | 0.305 8052 | 9.952 4917 | 104 | 10 |    |
| 19 | 0  | 9.646 7290 | 426 | 9.694 2478 | 530   | 0.305 7522 | 9.952 4813 | 105 | 0  | 41 |
|    | 10 | 9.646 7716 | 426 | 9.694 3008 | 529   | 0.305 6992 | 9.952 4708 | 104 | 50 |    |
|    | 20 | 9.646 8142 | 425 | 9.694 3537 | 530   | 0.305 6463 | 9.952 4604 | 104 | 40 |    |
|    | 30 | 9.646 8567 | 426 | 9.694 4067 | 530   | 0.305 5933 | 9.952 4500 | 104 | 30 |    |
|    | 40 | 9.646 8993 | 425 | 9.694 4597 | 529   | 0.305 5403 | 9.952 4396 | 104 | 20 |    |
|    | 50 | 9.646 9418 | 426 | 9.694 5126 | 530   | 0.305 4874 | 9.952 4292 | 104 | 10 |    |
| 20 | 0  | 9.646 9844 | 426 | 9.694 5656 | 530   | 0.305 4344 | 9.952 4188 | 104 | 0  | 40 |
|    |    |            |     |            |       |            |            |     |    |    |
|    | "  | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d.  | "  |    |







|    | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d.  | "  | '  |
|----|----|------------|-----|------------|-------|------------|------------|-----|----|----|
| 10 | o  | 9.644 4226 | 429 | 9.691 3809 | 532   | 0.308 6191 | 9.953 0418 | 104 | o  | 50 |
|    | 10 | 9.644 4655 | 428 | 9.691 4341 | 531   | 0.308 5659 | 9.953 0314 | 103 | 40 |    |
|    | 20 | 9.644 5083 | 428 | 9.691 4872 | 532   | 0.308 5128 | 9.953 0211 | 104 | 30 |    |
|    | 30 | 9.644 5511 | 429 | 9.691 5404 | 532   | 0.308 4596 | 9.953 0107 | 103 | 20 |    |
|    | 40 | 9.644 5940 | 428 | 9.691 5936 | 532   | 0.308 4064 | 9.953 0004 | 104 | 10 |    |
|    | 50 | 9.644 6368 | 428 | 9.691 6468 | 532   | 0.308 3532 | 9.952 9900 | 103 | o  | 49 |
| 1  | o  | 9.644 6796 | 429 | 9.691 7000 | 531   | 0.308 3000 | 9.952 9797 | 104 | 50 |    |
|    | 10 | 9.644 7225 | 428 | 9.691 7531 | 532   | 0.308 2469 | 9.952 9693 | 104 | 40 |    |
|    | 20 | 9.644 7653 | 428 | 9.691 8063 | 532   | 0.308 1937 | 9.952 9589 | 103 | 30 |    |
|    | 30 | 9.644 8081 | 428 | 9.691 8595 | 531   | 0.308 1405 | 9.952 9486 | 104 | 20 |    |
|    | 40 | 9.644 8509 | 428 | 9.691 9126 | 532   | 0.308 0874 | 9.952 9382 | 103 | 10 |    |
|    | 50 | 9.644 8937 | 428 | 9.691 9658 | 531   | 0.308 0342 | 9.952 9279 | 104 | o  | 48 |
| 12 | o  | 9.644 9365 | 428 | 9.692 0189 | 532   | 0.307 9811 | 9.952 9175 | 103 | 50 |    |
|    | 10 | 9.644 9793 | 427 | 9.692 0721 | 531   | 0.307 9279 | 9.952 9072 | 104 | 40 |    |
|    | 20 | 9.645 0220 | 428 | 9.692 1252 | 532   | 0.307 8748 | 9.952 8968 | 104 | 30 |    |
|    | 30 | 9.645 0648 | 428 | 9.692 1784 | 531   | 0.307 8216 | 9.952 8864 | 103 | 20 |    |
|    | 40 | 9.645 1076 | 427 | 9.692 2315 | 531   | 0.307 7685 | 9.952 8761 | 104 | 10 |    |
|    | 50 | 9.645 1503 | 428 | 9.692 2846 | 532   | 0.307 7154 | 9.952 8657 | 104 | o  | 47 |
| 13 | o  | 9.645 1931 | 428 | 9.692 3378 | 531   | 0.307 6622 | 9.952 8553 | 103 | 50 |    |
|    | 10 | 9.645 2359 | 427 | 9.692 3909 | 531   | 0.307 6091 | 9.952 8450 | 104 | 40 |    |
|    | 20 | 9.645 2786 | 428 | 9.692 4440 | 531   | 0.307 5560 | 9.952 8346 | 104 | 30 |    |
|    | 30 | 9.645 3214 | 427 | 9.692 4971 | 532   | 0.307 5029 | 9.952 8242 | 103 | 20 |    |
|    | 40 | 9.645 3641 | 427 | 9.692 5503 | 531   | 0.307 4497 | 9.952 8139 | 104 | 10 |    |
|    | 50 | 9.645 4068 | 428 | 9.692 6034 | 531   | 0.307 3966 | 9.952 8035 | 104 | o  | 46 |
| 14 | o  | 9.645 4496 | 427 | 9.692 6565 | 531   | 0.307 3435 | 9.952 7931 | 104 | 50 |    |
|    | 10 | 9.645 4923 | 427 | 9.692 7096 | 531   | 0.307 2904 | 9.952 7827 | 104 | 40 |    |
|    | 20 | 9.645 5350 | 427 | 9.692 7627 | 531   | 0.307 2373 | 9.952 7723 | 103 | 30 |    |
|    | 30 | 9.645 5777 | 427 | 9.692 8158 | 530   | 0.307 1842 | 9.952 7620 | 104 | 20 |    |
|    | 40 | 9.645 6204 | 427 | 9.692 8688 | 531   | 0.307 1312 | 9.952 7516 | 104 | 10 |    |
|    | 50 | 9.645 6631 | 427 | 9.692 9219 | 531   | 0.307 0781 | 9.952 7412 | 104 | o  | 45 |
| 15 | o  | 9.645 7058 | 427 | 9.692 9750 | 531   | 0.307 0250 | 9.952 7308 | 104 | 50 |    |
|    | 10 | 9.645 7485 | 427 | 9.693 0281 | 531   | 0.306 9719 | 9.952 7204 | 103 | 40 |    |
|    | 20 | 9.645 7912 | 427 | 9.693 0812 | 530   | 0.306 9188 | 9.952 7101 | 104 | 30 |    |
|    | 30 | 9.645 8339 | 427 | 9.693 1342 | 531   | 0.306 8658 | 9.952 6997 | 104 | 20 |    |
|    | 40 | 9.645 8766 | 426 | 9.693 1873 | 531   | 0.306 8127 | 9.952 6893 | 104 | 10 |    |
|    | 50 | 9.645 9192 | 427 | 9.693 2404 | 530   | 0.306 7596 | 9.952 6789 | 104 | o  | 44 |
| 16 | o  | 9.645 9619 | 427 | 9.693 2934 | 531   | 0.306 7066 | 9.952 6685 | 104 | 50 |    |
|    | 10 | 9.646 0046 | 426 | 9.693 3465 | 530   | 0.306 6535 | 9.952 6581 | 104 | 40 |    |
|    | 20 | 9.646 0472 | 427 | 9.693 3995 | 531   | 0.306 6005 | 9.952 6477 | 104 | 30 |    |
|    | 30 | 9.646 0899 | 426 | 9.693 4526 | 530   | 0.306 5474 | 9.952 6373 | 104 | 20 |    |
|    | 40 | 9.646 1325 | 427 | 9.693 5056 | 530   | 0.306 4944 | 9.952 6269 | 104 | 10 |    |
|    | 50 | 9.646 1752 | 426 | 9.693 5586 | 531   | 0.306 4414 | 9.952 6165 | 104 | o  | 43 |
| 17 | o  | 9.646 2178 | 426 | 9.693 6117 | 530   | 0.306 3883 | 9.952 6061 | 104 | 50 |    |
|    | 10 | 9.646 2604 | 427 | 9.693 6647 | 530   | 0.306 3353 | 9.952 5957 | 104 | 40 |    |
|    | 20 | 9.646 3031 | 426 | 9.693 7177 | 531   | 0.306 2823 | 9.952 5853 | 104 | 30 |    |
|    | 30 | 9.646 3457 | 426 | 9.693 7708 | 530   | 0.306 2292 | 9.952 5749 | 104 | 20 |    |
|    | 40 | 9.646 3883 | 426 | 9.693 8238 | 530   | 0.306 1762 | 9.952 5645 | 104 | 10 |    |
|    | 50 | 9.646 4309 | 426 | 9.693 8768 | 530   | 0.306 1232 | 9.952 5541 | 104 | o  | 42 |
| 18 | o  | 9.646 4735 | 426 | 9.693 9298 | 530   | 0.306 0702 | 9.952 5437 | 104 | 50 |    |
|    | 10 | 9.646 5161 | 426 | 9.693 9828 | 530   | 0.306 0172 | 9.952 5333 | 104 | 40 |    |
|    | 20 | 9.646 5587 | 426 | 9.694 0358 | 530   | 0.305 9642 | 9.952 5229 | 104 | 30 |    |
|    | 30 | 9.646 6013 | 426 | 9.694 0888 | 530   | 0.305 9112 | 9.952 5125 | 104 | 20 |    |
|    | 40 | 9.646 6439 | 426 | 9.694 1418 | 530   | 0.305 8582 | 9.952 5021 | 104 | 10 |    |
|    | 50 | 9.646 6865 | 425 | 9.694 1948 | 530   | 0.305 8052 | 9.952 4917 | 104 | o  | 41 |
| 19 | o  | 9.646 7290 | 426 | 9.694 2478 | 530   | 0.305 7522 | 9.952 4813 | 105 | 50 |    |
|    | 10 | 9.646 7716 | 426 | 9.694 3008 | 529   | 0.305 6992 | 9.952 4708 | 104 | 40 |    |
|    | 20 | 9.646 8142 | 425 | 9.694 3537 | 530   | 0.305 6463 | 9.952 4604 | 104 | 30 |    |
|    | 30 | 9.646 8567 | 426 | 9.694 4067 | 530   | 0.305 5933 | 9.952 4500 | 104 | 20 |    |
|    | 40 | 9.646 8993 | 425 | 9.694 4597 | 529   | 0.305 5403 | 9.952 4396 | 104 | 10 |    |
|    | 50 | 9.646 9418 | 426 | 9.694 5126 | 530   | 0.305 4874 | 9.952 4292 | 104 | o  | 40 |
| 20 | o  | 9.646 9844 | 426 | 9.694 5656 | 530   | 0.305 4344 | 9.952 4188 |     |    |    |
|    | "  | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d.  | "  | '  |

531

1 53.1  
2 106.2  
3 159.3  
4 212.4  
5 265.5  
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1 10.4  
2 20.8  
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4 41.6  
5 52.0  
6 62.4  
7 72.8  
8 83.2  
9 93.6



|        |    | sin        | d.  | Tang       | d. c. | Cotg       | Con        | d.  |    |    |
|--------|----|------------|-----|------------|-------|------------|------------|-----|----|----|
| 689    | 0  | 9.646 9844 | 435 | 9.694 5656 | 539   | 0.405 4444 | 9.953 4188 | 105 | 0  | 40 |
| 1 51.9 | 10 | 9.647 0269 | 435 | 9.694 6176 | 539   | 0.405 4384 | 9.953 4084 | 104 | 50 |    |
| 1 51.8 | 20 | 9.647 0694 | 435 | 9.694 6715 | 539   | 0.405 4325 | 9.953 3979 | 104 | 40 |    |
| 1 51.7 | 30 | 9.647 1130 | 435 | 9.694 7245 | 539   | 0.405 4265 | 9.953 3875 | 104 | 30 |    |
| 1 51.6 | 40 | 9.647 1575 | 435 | 9.694 7774 | 539   | 0.405 4206 | 9.953 3772 | 104 | 20 |    |
| 1 51.5 | 50 | 9.647 2020 | 435 | 9.694 8304 | 539   | 0.405 4146 | 9.953 3668 | 104 | 10 |    |
| 1 51.4 | 0  | 9.647 2495 | 435 | 9.694 8844 | 539   | 0.405 4087 | 9.953 3564 | 104 | 0  | 39 |
| 1 51.3 | 10 | 9.647 2840 | 435 | 9.694 9364 | 539   | 0.405 4028 | 9.953 3460 | 104 | 50 |    |
| 1 51.2 | 20 | 9.647 3245 | 435 | 9.694 9894 | 539   | 0.405 3968 | 9.953 3356 | 104 | 40 |    |
| 1 51.1 | 30 | 9.647 3690 | 435 | 9.695 0424 | 539   | 0.405 3909 | 9.953 3252 | 104 | 30 |    |
| 1 51.0 | 40 | 9.647 4135 | 435 | 9.695 0954 | 539   | 0.405 3849 | 9.953 3148 | 104 | 20 |    |
| 1 50.9 | 50 | 9.647 4580 | 435 | 9.695 1479 | 539   | 0.405 3790 | 9.953 3044 | 104 | 10 |    |
| 589    | 0  | 9.647 4975 | 435 | 9.695 1999 | 539   | 0.405 3731 | 9.953 2940 | 104 | 0  | 38 |
| 1 50.8 | 10 | 9.647 5400 | 435 | 9.695 2519 | 539   | 0.405 3672 | 9.953 2836 | 104 | 50 |    |
| 1 50.7 | 20 | 9.647 5825 | 435 | 9.695 3039 | 539   | 0.405 3613 | 9.953 2732 | 104 | 40 |    |
| 1 50.6 | 30 | 9.647 6250 | 435 | 9.695 3559 | 539   | 0.405 3554 | 9.953 2628 | 104 | 30 |    |
| 1 50.5 | 40 | 9.647 6675 | 435 | 9.695 4079 | 539   | 0.405 3495 | 9.953 2524 | 104 | 20 |    |
| 1 50.4 | 50 | 9.647 7100 | 435 | 9.695 4599 | 539   | 0.405 3436 | 9.953 2420 | 104 | 10 |    |
| 1 50.3 | 0  | 9.647 7525 | 435 | 9.695 5119 | 539   | 0.405 3377 | 9.953 2316 | 104 | 0  | 37 |
| 1 50.2 | 10 | 9.647 7950 | 435 | 9.695 5639 | 539   | 0.405 3318 | 9.953 2212 | 104 | 50 |    |
| 1 50.1 | 20 | 9.647 8375 | 435 | 9.695 6159 | 539   | 0.405 3259 | 9.953 2108 | 104 | 40 |    |
| 1 50.0 | 30 | 9.647 8800 | 435 | 9.695 6679 | 539   | 0.405 3200 | 9.953 2004 | 104 | 30 |    |
| 1 49.9 | 40 | 9.647 9225 | 435 | 9.695 7199 | 539   | 0.405 3141 | 9.953 1900 | 104 | 20 |    |
| 1 49.8 | 50 | 9.647 9650 | 435 | 9.695 7719 | 539   | 0.405 3082 | 9.953 1796 | 104 | 10 |    |
| 489    | 0  | 9.648 0075 | 435 | 9.695 8239 | 539   | 0.405 3023 | 9.953 1692 | 104 | 0  | 36 |
| 1 49.7 | 10 | 9.648 0500 | 435 | 9.695 8759 | 539   | 0.405 2964 | 9.953 1588 | 104 | 50 |    |
| 1 49.6 | 20 | 9.648 0925 | 435 | 9.695 9279 | 539   | 0.405 2905 | 9.953 1484 | 104 | 40 |    |
| 1 49.5 | 30 | 9.648 1350 | 435 | 9.695 9799 | 539   | 0.405 2846 | 9.953 1380 | 104 | 30 |    |
| 1 49.4 | 40 | 9.648 1775 | 435 | 9.696 0319 | 539   | 0.405 2787 | 9.953 1276 | 104 | 20 |    |
| 1 49.3 | 50 | 9.648 2200 | 435 | 9.696 0839 | 539   | 0.405 2728 | 9.953 1172 | 104 | 10 |    |
| 479    | 0  | 9.648 2625 | 435 | 9.696 1359 | 539   | 0.405 2669 | 9.953 1068 | 104 | 0  | 35 |
| 1 49.2 | 10 | 9.648 3050 | 435 | 9.696 1879 | 539   | 0.405 2610 | 9.953 0964 | 104 | 50 |    |
| 1 49.1 | 20 | 9.648 3475 | 435 | 9.696 2399 | 539   | 0.405 2551 | 9.953 0860 | 104 | 40 |    |
| 1 49.0 | 30 | 9.648 3900 | 435 | 9.696 2919 | 539   | 0.405 2492 | 9.953 0756 | 104 | 30 |    |
| 1 48.9 | 40 | 9.648 4325 | 435 | 9.696 3439 | 539   | 0.405 2433 | 9.953 0652 | 104 | 20 |    |
| 1 48.8 | 50 | 9.648 4750 | 435 | 9.696 3959 | 539   | 0.405 2374 | 9.953 0548 | 104 | 10 |    |
| 469    | 0  | 9.648 5175 | 435 | 9.696 4479 | 539   | 0.405 2315 | 9.953 0444 | 104 | 0  | 34 |
| 1 48.7 | 10 | 9.648 5600 | 435 | 9.696 4999 | 539   | 0.405 2256 | 9.953 0340 | 104 | 50 |    |
| 1 48.6 | 20 | 9.648 6025 | 435 | 9.696 5519 | 539   | 0.405 2197 | 9.953 0236 | 104 | 40 |    |
| 1 48.5 | 30 | 9.648 6450 | 435 | 9.696 6039 | 539   | 0.405 2138 | 9.953 0132 | 104 | 30 |    |
| 1 48.4 | 40 | 9.648 6875 | 435 | 9.696 6559 | 539   | 0.405 2079 | 9.953 0028 | 104 | 20 |    |
| 1 48.3 | 50 | 9.648 7300 | 435 | 9.696 7079 | 539   | 0.405 2020 | 9.953 0024 | 104 | 10 |    |
| 459    | 0  | 9.648 7725 | 435 | 9.696 7599 | 539   | 0.405 1961 | 9.953 0020 | 104 | 0  | 33 |
| 1 48.2 | 10 | 9.648 8150 | 435 | 9.696 8119 | 539   | 0.405 1902 | 9.953 0016 | 104 | 50 |    |
| 1 48.1 | 20 | 9.648 8575 | 435 | 9.696 8639 | 539   | 0.405 1843 | 9.953 0012 | 104 | 40 |    |
| 1 48.0 | 30 | 9.648 8900 | 435 | 9.696 9159 | 539   | 0.405 1784 | 9.953 0008 | 104 | 30 |    |
| 1 47.9 | 40 | 9.648 9325 | 435 | 9.696 9679 | 539   | 0.405 1725 | 9.953 0004 | 104 | 20 |    |
| 1 47.8 | 50 | 9.648 9750 | 435 | 9.697 0199 | 539   | 0.405 1666 | 9.953 0000 | 104 | 10 |    |
| 449    | 0  | 9.649 0175 | 435 | 9.697 0719 | 539   | 0.405 1607 | 9.953 0000 | 104 | 0  | 32 |
| 1 47.7 | 10 | 9.649 0600 | 435 | 9.697 1239 | 539   | 0.405 1548 | 9.953 0000 | 104 | 50 |    |
| 1 47.6 | 20 | 9.649 1025 | 435 | 9.697 1759 | 539   | 0.405 1489 | 9.953 0000 | 104 | 40 |    |
| 1 47.5 | 30 | 9.649 1450 | 435 | 9.697 2279 | 539   | 0.405 1430 | 9.953 0000 | 104 | 30 |    |
| 1 47.4 | 40 | 9.649 1875 | 435 | 9.697 2799 | 539   | 0.405 1371 | 9.953 0000 | 104 | 20 |    |
| 1 47.3 | 50 | 9.649 2300 | 435 | 9.697 3319 | 539   | 0.405 1312 | 9.953 0000 | 104 | 10 |    |
| 439    | 0  | 9.649 2725 | 435 | 9.697 3839 | 539   | 0.405 1253 | 9.953 0000 | 104 | 0  | 31 |
| 1 47.2 | 10 | 9.649 3150 | 435 | 9.697 4359 | 539   | 0.405 1194 | 9.953 0000 | 104 | 50 |    |
| 1 47.1 | 20 | 9.649 3575 | 435 | 9.697 4879 | 539   | 0.405 1135 | 9.953 0000 | 104 | 40 |    |
| 1 47.0 | 30 | 9.649 4000 | 435 | 9.697 5399 | 539   | 0.405 1076 | 9.953 0000 | 104 | 30 |    |
| 1 46.9 | 40 | 9.649 4425 | 435 | 9.697 5919 | 539   | 0.405 1017 | 9.953 0000 | 104 | 20 |    |
| 1 46.8 | 50 | 9.649 4850 | 435 | 9.697 6439 | 539   | 0.405 0958 | 9.953 0000 | 104 | 10 |    |
| 429    | 0  | 9.649 5275 | 435 | 9.697 6959 | 539   | 0.405 0899 | 9.953 0000 | 104 | 0  | 30 |
| 1 46.7 | 10 | 9.649 5700 | 435 | 9.697 7479 | 539   | 0.405 0840 | 9.953 0000 | 104 | 50 |    |
| 1 46.6 | 20 | 9.649 6125 | 435 | 9.697 7999 | 539   | 0.405 0781 | 9.953 0000 | 104 | 40 |    |
| 1 46.5 | 30 | 9.649 6550 | 435 | 9.697 8519 | 539   | 0.405 0722 | 9.953 0000 | 104 | 30 |    |
| 1 46.4 | 40 | 9.649 6975 | 435 | 9.697 9039 | 539   | 0.405 0663 | 9.953 0000 | 104 | 20 |    |
| 1 46.3 | 50 | 9.649 7400 | 435 | 9.697 9559 | 539   | 0.405 0604 | 9.953 0000 | 104 | 10 |    |
| 419    | 0  | 9.649 7825 | 435 | 9.698 0079 | 539   | 0.405 0545 | 9.953 0000 | 104 | 0  | 29 |
| 1 46.2 | 10 | 9.649 8250 | 435 | 9.698 0599 | 539   | 0.405 0486 | 9.953 0000 | 104 | 50 |    |
| 1 46.1 | 20 | 9.649 8675 | 435 | 9.698 1119 | 539   | 0.405 0427 | 9.953 0000 | 104 | 40 |    |
| 1 46.0 | 30 | 9.649 9100 | 435 | 9.698 1639 | 539   | 0.405 0368 | 9.953 0000 | 104 | 30 |    |
| 1 45.9 | 40 | 9.649 9525 | 435 | 9.698 2159 | 539   | 0.405 0309 | 9.953 0000 | 104 | 20 |    |
| 1 45.8 | 50 | 9.649 9950 | 435 | 9.698 2679 | 539   | 0.405 0250 | 9.953 0000 | 104 | 10 |    |
| 409    | 0  | 9.650 0375 | 435 | 9.698 3199 | 539   | 0.405 0191 | 9.953 0000 | 104 | 0  | 28 |
| 1 45.7 | 10 | 9.650 0800 | 435 | 9.698 3719 | 539   | 0.405 0132 | 9.953 0000 | 104 | 50 |    |
| 1 45.6 | 20 | 9.650 1225 | 435 | 9.698 4239 | 539   | 0.405 0073 | 9.953 0000 | 104 | 40 |    |
| 1 45.5 | 30 | 9.650 1650 | 435 | 9.698 4759 | 539   | 0.405 0014 | 9.953 0000 | 104 | 30 |    |
| 1 45.4 | 40 | 9.650 2075 | 435 | 9.698 5279 | 539   | 0.405 0055 | 9.953 0000 | 104 | 20 |    |
| 1 45.3 | 50 | 9.650 2500 | 435 | 9.698 5799 | 539   | 0.405 0096 | 9.953 0000 | 104 | 10 |    |
| 399    | 0  | 9.650 2925 | 435 | 9.698 6319 | 539   | 0.405 0037 | 9.953 0000 | 104 | 0  | 27 |
| 1 45.2 | 10 | 9.650 3350 | 435 | 9.698 6839 | 539   | 0.405 0078 | 9.953 0000 | 104 | 50 |    |
| 1 45.1 | 20 | 9.650 3775 | 435 | 9.698 7359 | 539   | 0.405 0019 | 9.953 0000 | 104 | 40 |    |
| 1 45.0 | 30 | 9.650 4200 | 435 | 9.698 7879 | 539   | 0.405 0060 | 9.953 0000 | 104 | 30 |    |
| 1 44.9 | 40 | 9.650 4625 | 435 | 9.698 8399 | 539   | 0.405 0001 | 9.953 0000 | 104 | 20 |    |
| 1 44.8 | 50 | 9.650 5050 | 435 | 9.698 8919 | 539   | 0.405 0042 | 9.953 0000 | 104 | 10 |    |
| 389    | 0  | 9.650 5475 | 435 | 9.698 9439 | 539   | 0.405 0083 | 9.953 0000 | 104 | 0  | 26 |
| 1 44.7 | 10 | 9.650 5900 | 435 | 9.698 9959 | 539   | 0.405 0124 | 9.953 0000 | 104 | 50 |    |
| 1 44.6 | 20 | 9.650 6325 | 435 | 9.699 0479 | 539   | 0.405 0165 | 9.953 0000 | 104 | 40 |    |
| 1 44.5 | 30 | 9.650 6750 | 435 | 9.699 0999 | 539   | 0.405 0206 | 9.953 0000 | 104 | 30 |    |
| 1 44.4 | 40 | 9.650 7175 | 435 | 9.699 1519 | 539   | 0.405 0247 | 9.953 0000 | 104 | 20 |    |
| 1 44.3 | 50 | 9.650 7600 | 435 | 9.699 2039 | 539   | 0.405 0288 | 9.953 0000 | 104 | 10 |    |
| 379    | 0  | 9.650 8025 | 435 | 9.699 2559 | 539   | 0.405 0329 | 9.953 0000 | 104 | 0  | 25 |
| 1 44.2 | 10 | 9.650 8450 | 435 | 9.699 3079 | 539   | 0.405 0370 | 9.953 0000 | 104 | 50 |    |
| 1 44.1 | 20 | 9.650 8875 | 435 | 9.699 3599 | 539   | 0.405 0411 | 9.953 0000 | 104 | 40 |    |
| 1 44.0 | 30 | 9.650 9300 | 435 | 9.699 4119 | 539   | 0.405 0452 | 9.953 0000 | 104 | 30 |    |
| 1 43.9 | 40 | 9.650 9725 | 435 | 9.699 4639 | 539   | 0.405 0493 | 9.953 0000 | 104 | 20 |    |
| 1 43.8 | 50 | 9.651 0150 | 435 | 9.699 5159 | 539   | 0.405 0534 | 9.953 0000 | 104 | 10 |    |
| 369    | 0  | 9.651 0575 | 435 | 9.699 5679 | 539   | 0.405 0575 | 9.953 0000 | 104 | 0  | 24 |
| 1 43.7 | 10 | 9.651 1000 | 435 | 9.699 6199 | 539   | 0.405 0616 | 9.953 0000 | 104 | 50 |    |
| 1 43.6 | 20 | 9.651 1425 | 435 | 9.699 6719 | 539   | 0.405 0657 | 9.953 0000 | 104 | 40 |    |
| 1 43.5 | 30 | 9.651 1850 | 435 | 9.699 7239 | 539   | 0.405 0698 | 9.953 0000 | 104 | 30 |    |
| 1 43.4 | 40 | 9.651 2275 | 435 | 9.699 7759 | 539   | 0.405 0739 | 9.953 0000 | 104 | 20 |    |
| 1 43.3 | 50 | 9.651 2700 | 435 | 9.699 8279 | 539   | 0.405 0780 | 9.953 0000 | 104 | 10 |    |
| 359    | 0  | 9.651 3125 | 435 | 9.699 8799 | 539   | 0.405 0821 | 9.953 0000 | 104 | 0  | 23 |



|    | "  | Sin        | d.  | Tang       | d. c. | Cotg       | CoS        | d.  | "  |         |
|----|----|------------|-----|------------|-------|------------|------------|-----|----|---------|
| 30 | 0  | 9.649 5274 | 423 | 9.697 7363 | 527   | 0.302 2637 | 9.951 7912 | 105 | 0  | 30      |
|    | 10 | 9.649 5097 | 422 | 9.697 7890 | 527   | 0.302 2110 | 9.951 7807 | 105 | 50 | 526     |
|    | 20 | 9.649 6119 | 422 | 9.697 8417 | 527   | 0.302 1583 | 9.951 7702 | 105 | 40 | 1 52.6  |
|    | 30 | 9.649 6541 | 422 | 9.697 8944 | 527   | 0.302 1056 | 9.951 7597 | 105 | 30 | 2 105.2 |
|    | 40 | 9.649 6963 | 422 | 9.697 9471 | 527   | 0.302 0529 | 9.951 7492 | 105 | 20 | 3 157.8 |
|    | 50 | 9.649 7385 | 422 | 9.697 9998 | 528   | 0.302 0002 | 9.951 7387 | 105 | 10 | 4 210.4 |
| 31 | 0  | 9.649 7807 | 422 | 9.698 0526 | 527   | 0.301 9474 | 9.951 7282 | 105 | 0  | 5 263.0 |
|    | 10 | 9.649 8229 | 422 | 9.698 1053 | 527   | 0.301 8947 | 9.951 7177 | 105 | 50 | 6 315.6 |
|    | 20 | 9.649 8651 | 422 | 9.698 1580 | 526   | 0.301 8420 | 9.951 7072 | 105 | 40 | 7 368.2 |
|    | 30 | 9.649 9073 | 422 | 9.698 2106 | 526   | 0.301 7894 | 9.951 6967 | 106 | 30 | 8 420.8 |
|    | 40 | 9.649 9495 | 422 | 9.698 2633 | 527   | 0.301 7367 | 9.951 6861 | 105 | 20 | 9 473.4 |
|    | 50 | 9.649 9917 | 421 | 9.698 3160 | 527   | 0.301 6840 | 9.951 6756 | 105 | 10 |         |
| 32 | 0  | 9.650 0338 | 422 | 9.698 3687 | 527   | 0.301 6313 | 9.951 6651 | 105 | 0  | 526     |
|    | 10 | 9.650 0760 | 422 | 9.698 4214 | 527   | 0.301 5786 | 9.951 6546 | 105 | 50 | 1 52.5  |
|    | 20 | 9.650 1182 | 422 | 9.698 4741 | 526   | 0.301 5259 | 9.951 6441 | 105 | 40 | 2 105.0 |
|    | 30 | 9.650 1603 | 421 | 9.698 5267 | 526   | 0.301 4733 | 9.951 6336 | 105 | 30 | 3 157.5 |
|    | 40 | 9.650 2025 | 422 | 9.698 5794 | 527   | 0.301 4206 | 9.951 6231 | 106 | 20 | 4 210.0 |
|    | 50 | 9.650 2446 | 421 | 9.698 6321 | 526   | 0.301 3679 | 9.951 6125 | 105 | 10 | 5 262.5 |
| 33 | 0  | 9.650 2868 | 422 | 9.698 6847 | 527   | 0.301 3153 | 9.951 6020 | 105 | 0  | 6 315.0 |
|    | 10 | 9.650 3289 | 421 | 9.698 7374 | 527   | 0.301 2626 | 9.951 5915 | 105 | 50 | 7 367.5 |
|    | 20 | 9.650 3710 | 421 | 9.698 7900 | 526   | 0.301 2100 | 9.951 5810 | 106 | 40 | 8 420.0 |
|    | 30 | 9.650 4131 | 422 | 9.698 8427 | 526   | 0.301 1573 | 9.951 5704 | 105 | 30 | 9 472.5 |
|    | 40 | 9.650 4553 | 422 | 9.698 8953 | 527   | 0.301 1047 | 9.951 5599 | 105 | 20 |         |
|    | 50 | 9.650 4974 | 421 | 9.698 9480 | 526   | 0.301 0520 | 9.951 5494 | 105 | 10 | 423     |
| 34 | 0  | 9.650 5395 | 421 | 9.699 0006 | 527   | 0.300 9994 | 9.951 5389 | 106 | 0  | 1 42.3  |
|    | 10 | 9.650 5816 | 421 | 9.699 0533 | 527   | 0.300 9467 | 9.951 5283 | 105 | 50 | 2 84.0  |
|    | 20 | 9.650 6237 | 421 | 9.699 1059 | 526   | 0.300 8941 | 9.951 5178 | 105 | 40 | 3 126.9 |
|    | 30 | 9.650 6658 | 421 | 9.699 1585 | 526   | 0.300 8415 | 9.951 5073 | 106 | 30 | 4 169.2 |
|    | 40 | 9.650 7079 | 421 | 9.699 2111 | 527   | 0.300 7889 | 9.951 4967 | 105 | 20 | 5 211.5 |
|    | 50 | 9.650 7500 | 420 | 9.699 2637 | 526   | 0.300 7363 | 9.951 4862 | 105 | 10 | 6 253.8 |
| 35 | 0  | 9.650 7920 | 421 | 9.699 3164 | 526   | 0.300 6836 | 9.951 4757 | 106 | 0  | 7 296.1 |
|    | 10 | 9.650 8341 | 421 | 9.699 3690 | 526   | 0.300 6310 | 9.951 4651 | 105 | 50 | 8 338.4 |
|    | 20 | 9.650 8762 | 421 | 9.699 4216 | 526   | 0.300 5784 | 9.951 4546 | 105 | 40 | 9 380.7 |
|    | 30 | 9.650 9182 | 420 | 9.699 4742 | 526   | 0.300 5258 | 9.951 4441 | 106 | 30 |         |
|    | 40 | 9.650 9603 | 421 | 9.699 5268 | 526   | 0.300 4732 | 9.951 4335 | 105 | 20 | 422     |
|    | 50 | 9.651 0024 | 420 | 9.699 5794 | 526   | 0.300 4206 | 9.951 4230 | 106 | 10 | 1 42.2  |
| 36 | 0  | 9.651 0444 | 421 | 9.699 6320 | 526   | 0.300 3680 | 9.951 4124 | 105 | 0  | 2 84.4  |
|    | 10 | 9.651 0865 | 421 | 9.699 6846 | 525   | 0.300 3154 | 9.951 4019 | 106 | 50 | 3 126.3 |
|    | 20 | 9.651 1285 | 420 | 9.699 7371 | 526   | 0.300 2629 | 9.951 3913 | 105 | 40 | 4 168.8 |
|    | 30 | 9.651 1705 | 420 | 9.699 7897 | 526   | 0.300 2103 | 9.951 3808 | 105 | 30 | 5 211.0 |
|    | 40 | 9.651 2126 | 421 | 9.699 8423 | 526   | 0.300 1577 | 9.951 3703 | 106 | 20 | 6 253.2 |
|    | 50 | 9.651 2546 | 420 | 9.699 8949 | 525   | 0.300 1051 | 9.951 3597 | 105 | 10 | 7 295.4 |
| 37 | 0  | 9.651 2966 | 420 | 9.699 9474 | 526   | 0.300 0526 | 9.951 3492 | 106 | 0  | 8 337.6 |
|    | 10 | 9.651 3386 | 420 | 9.700 0000 | 526   | 0.300 0000 | 9.951 3386 | 106 | 50 | 9 379.8 |
|    | 20 | 9.651 3806 | 420 | 9.700 0526 | 525   | 0.299 9474 | 9.951 3280 | 105 | 40 |         |
|    | 30 | 9.651 4226 | 420 | 9.700 1051 | 525   | 0.299 8949 | 9.951 3175 | 106 | 30 | 421     |
|    | 40 | 9.651 4646 | 420 | 9.700 1577 | 525   | 0.299 8423 | 9.951 3069 | 105 | 20 | 1 42.1  |
|    | 50 | 9.651 5066 | 420 | 9.700 2102 | 525   | 0.299 7898 | 9.951 2964 | 106 | 10 | 2 84.2  |
| 38 | 0  | 9.651 5486 | 420 | 9.700 2628 | 525   | 0.299 7372 | 9.951 2858 | 105 | 0  | 3 126.3 |
|    | 10 | 9.651 5906 | 420 | 9.700 3153 | 526   | 0.299 6847 | 9.951 2753 | 106 | 50 | 4 168.4 |
|    | 20 | 9.651 6326 | 419 | 9.700 3679 | 525   | 0.299 6321 | 9.951 2647 | 106 | 40 | 5 210.5 |
|    | 30 | 9.651 6745 | 419 | 9.700 4204 | 525   | 0.299 5796 | 9.951 2541 | 105 | 30 | 6 252.1 |
|    | 40 | 9.651 7165 | 420 | 9.700 4729 | 525   | 0.299 5271 | 9.951 2436 | 106 | 20 | 7 294.1 |
|    | 50 | 9.651 7585 | 419 | 9.700 5254 | 526   | 0.299 4746 | 9.951 2330 | 106 | 10 | 8 336.1 |
| 39 | 0  | 9.651 8004 | 420 | 9.700 5780 | 525   | 0.299 4220 | 9.951 2224 | 105 | 0  | 9 378.1 |
|    | 10 | 9.651 8424 | 419 | 9.700 6305 | 525   | 0.299 3695 | 9.951 2119 | 106 | 50 |         |
|    | 20 | 9.651 8843 | 420 | 9.700 6830 | 525   | 0.299 3170 | 9.951 2013 | 106 | 40 | 106     |
|    | 30 | 9.651 9263 | 420 | 9.700 7355 | 525   | 0.299 2645 | 9.951 1907 | 105 | 30 | 1 10.6  |
|    | 40 | 9.651 9682 | 419 | 9.700 7880 | 525   | 0.299 2120 | 9.951 1802 | 106 | 20 | 2 21.2  |
|    | 50 | 9.652 0101 | 420 | 9.700 8405 | 525   | 0.299 1595 | 9.951 1696 | 106 | 10 | 3 31.8  |
| 40 | 0  | 9.652 0521 | 420 | 9.700 8930 | 525   | 0.299 1070 | 9.951 1590 | 106 | 0  | 4 42.4  |
|    |    |            |     |            |       |            |            |     |    | 5 53.0  |
|    |    |            |     |            |       |            |            |     |    | 6 63.6  |
|    |    |            |     |            |       |            |            |     |    | 7 74.2  |
|    |    |            |     |            |       |            |            |     |    | 8 84.8  |
|    |    |            |     |            |       |            |            |     |    | 9 95.4  |
|    | "  | CoS        | d.  | Cotg       | d. c. | Tang       | Sin        | d.  | "  |         |







|    | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d.  | "  |    |
|----|----|------------|-----|------------|-------|------------|------------|-----|----|----|
| 50 | 0  | 9.654 5584 | 416 | 9.704 0362 | 522   | 0.295 9638 | 9.950 5223 | 107 | 0  | 10 |
|    | 10 | 9.654 6000 | 417 | 9.704 0884 | 523   | 0.295 9116 | 9.950 5116 | 106 | 50 |    |
|    | 20 | 9.654 6417 | 416 | 9.704 1407 | 523   | 0.295 8593 | 9.950 5010 | 107 | 40 |    |
|    | 30 | 9.654 6833 | 416 | 9.704 1930 | 522   | 0.295 8070 | 9.950 4903 | 107 | 30 |    |
|    | 40 | 9.654 7249 | 416 | 9.704 2452 | 522   | 0.295 7548 | 9.950 4796 | 106 | 20 |    |
|    | 50 | 9.654 7665 | 416 | 9.704 2975 | 523   | 0.295 7025 | 9.950 4690 | 106 | 10 |    |
| 51 | 0  | 9.654 8081 | 416 | 9.704 3497 | 523   | 0.295 6503 | 9.950 4583 | 106 | 0  | 9  |
|    | 10 | 9.654 8497 | 415 | 9.704 4020 | 522   | 0.295 5980 | 9.950 4477 | 107 | 50 |    |
|    | 20 | 9.654 8912 | 416 | 9.704 4542 | 523   | 0.295 5458 | 9.950 4370 | 107 | 40 |    |
|    | 30 | 9.654 9328 | 416 | 9.704 5065 | 522   | 0.295 4935 | 9.950 4263 | 106 | 30 |    |
|    | 40 | 9.654 9744 | 416 | 9.704 5587 | 522   | 0.295 4413 | 9.950 4157 | 107 | 20 |    |
|    | 50 | 9.655 0160 | 415 | 9.704 6109 | 523   | 0.295 3891 | 9.950 4050 | 106 | 10 |    |
| 52 | 0  | 9.655 0575 | 416 | 9.704 6632 | 522   | 0.295 3368 | 9.950 3944 | 107 | 0  | 8  |
|    | 10 | 9.655 0991 | 415 | 9.704 7154 | 522   | 0.295 2846 | 9.950 3837 | 107 | 50 |    |
|    | 20 | 9.655 1406 | 416 | 9.704 7676 | 522   | 0.295 2324 | 9.950 3730 | 106 | 40 |    |
|    | 30 | 9.655 1822 | 416 | 9.704 8198 | 523   | 0.295 1802 | 9.950 3624 | 107 | 30 |    |
|    | 40 | 9.655 2237 | 416 | 9.704 8721 | 522   | 0.295 1279 | 9.950 3517 | 107 | 20 |    |
|    | 50 | 9.655 2653 | 415 | 9.704 9243 | 522   | 0.295 0757 | 9.950 3410 | 107 | 10 |    |
| 53 | 0  | 9.655 3068 | 415 | 9.704 9765 | 522   | 0.295 0235 | 9.950 3303 | 106 | 0  | 7  |
|    | 10 | 9.655 3483 | 416 | 9.705 0287 | 522   | 0.294 9713 | 9.950 3197 | 107 | 50 |    |
|    | 20 | 9.655 3899 | 415 | 9.705 0809 | 522   | 0.294 9191 | 9.950 3090 | 107 | 40 |    |
|    | 30 | 9.655 4314 | 415 | 9.705 1331 | 522   | 0.294 8669 | 9.950 2983 | 107 | 30 |    |
|    | 40 | 9.655 4729 | 415 | 9.705 1853 | 522   | 0.294 8147 | 9.950 2876 | 107 | 20 |    |
|    | 50 | 9.655 5144 | 415 | 9.705 2375 | 522   | 0.294 7625 | 9.950 2769 | 106 | 10 |    |
| 54 | 0  | 9.655 5559 | 415 | 9.705 2897 | 521   | 0.294 7103 | 9.950 2663 | 107 | 0  | 6  |
|    | 10 | 9.655 5974 | 415 | 9.705 3418 | 522   | 0.294 6582 | 9.950 2556 | 107 | 50 |    |
|    | 20 | 9.655 6389 | 415 | 9.705 3940 | 522   | 0.294 6060 | 9.950 2449 | 107 | 40 |    |
|    | 30 | 9.655 6804 | 415 | 9.705 4462 | 522   | 0.294 5538 | 9.950 2342 | 107 | 30 |    |
|    | 40 | 9.655 7219 | 415 | 9.705 4984 | 521   | 0.294 5016 | 9.950 2235 | 107 | 20 |    |
|    | 50 | 9.655 7634 | 414 | 9.705 5505 | 522   | 0.294 4495 | 9.950 2128 | 106 | 10 |    |
| 55 | 0  | 9.655 8048 | 415 | 9.705 6027 | 521   | 0.294 3973 | 9.950 2022 | 107 | 0  | 5  |
|    | 10 | 9.655 8463 | 415 | 9.705 6548 | 522   | 0.294 3452 | 9.950 1915 | 107 | 50 |    |
|    | 20 | 9.655 8878 | 414 | 9.705 7070 | 522   | 0.294 2930 | 9.950 1808 | 107 | 40 |    |
|    | 30 | 9.655 9292 | 415 | 9.705 7592 | 521   | 0.294 2408 | 9.950 1701 | 107 | 30 |    |
|    | 40 | 9.655 9707 | 414 | 9.705 8113 | 521   | 0.294 1887 | 9.950 1594 | 107 | 20 |    |
|    | 50 | 9.656 0121 | 415 | 9.705 8634 | 522   | 0.294 1366 | 9.950 1487 | 107 | 10 |    |
| 56 | 0  | 9.656 0536 | 414 | 9.705 9156 | 521   | 0.294 0844 | 9.950 1380 | 107 | 0  | 4  |
|    | 10 | 9.656 0950 | 415 | 9.705 9677 | 522   | 0.294 0323 | 9.950 1273 | 107 | 50 |    |
|    | 20 | 9.656 1365 | 414 | 9.706 0199 | 522   | 0.293 9801 | 9.950 1166 | 107 | 40 |    |
|    | 30 | 9.656 1779 | 414 | 9.706 0720 | 521   | 0.293 9280 | 9.950 1059 | 107 | 30 |    |
|    | 40 | 9.656 2193 | 414 | 9.706 1241 | 521   | 0.293 8759 | 9.950 0952 | 107 | 20 |    |
|    | 50 | 9.656 2607 | 414 | 9.706 1762 | 522   | 0.293 8238 | 9.950 0845 | 107 | 10 |    |
| 57 | 0  | 9.656 3021 | 415 | 9.706 2284 | 521   | 0.293 7716 | 9.950 0738 | 107 | 0  | 3  |
|    | 10 | 9.656 3436 | 414 | 9.706 2805 | 521   | 0.293 7195 | 9.950 0631 | 107 | 50 |    |
|    | 20 | 9.656 3850 | 414 | 9.706 3326 | 521   | 0.293 6674 | 9.950 0524 | 107 | 40 |    |
|    | 30 | 9.656 4264 | 414 | 9.706 3847 | 521   | 0.293 6153 | 9.950 0417 | 107 | 30 |    |
|    | 40 | 9.656 4678 | 414 | 9.706 4368 | 521   | 0.293 5632 | 9.950 0310 | 108 | 20 |    |
|    | 50 | 9.656 5091 | 414 | 9.706 4889 | 521   | 0.293 5111 | 9.950 0202 | 107 | 10 |    |
| 58 | 0  | 9.656 5505 | 414 | 9.706 5410 | 521   | 0.293 4590 | 9.950 0095 | 107 | 0  | 2  |
|    | 10 | 9.656 5919 | 414 | 9.706 5931 | 521   | 0.293 4069 | 9.949 9988 | 107 | 50 |    |
|    | 20 | 9.656 6333 | 414 | 9.706 6452 | 521   | 0.293 3548 | 9.949 9881 | 107 | 40 |    |
|    | 30 | 9.656 6747 | 413 | 9.706 6973 | 521   | 0.293 3027 | 9.949 9774 | 107 | 30 |    |
|    | 40 | 9.656 7160 | 414 | 9.706 7494 | 520   | 0.293 2506 | 9.949 9667 | 108 | 20 |    |
|    | 50 | 9.656 7574 | 413 | 9.706 8014 | 520   | 0.293 1986 | 9.949 9559 | 107 | 10 |    |
| 59 | 0  | 9.656 7987 | 414 | 9.706 8535 | 521   | 0.293 1465 | 9.949 9452 | 107 | 0  | 1  |
|    | 10 | 9.656 8401 | 413 | 9.706 9056 | 520   | 0.293 0944 | 9.949 9345 | 107 | 50 |    |
|    | 20 | 9.656 8814 | 414 | 9.706 9576 | 521   | 0.293 0424 | 9.949 9238 | 107 | 40 |    |
|    | 30 | 9.656 9228 | 413 | 9.707 0097 | 521   | 0.292 9903 | 9.949 9131 | 108 | 30 |    |
|    | 40 | 9.656 9641 | 413 | 9.707 0618 | 520   | 0.292 9382 | 9.949 9023 | 107 | 20 |    |
|    | 50 | 9.657 0054 | 413 | 9.707 1138 | 520   | 0.292 8862 | 9.949 8916 | 107 | 10 |    |
| 60 | 0  | 9.657 0468 | 414 | 9.707 1659 | 521   | 0.292 8341 | 9.949 8809 | 107 | 0  | 0  |
|    |    |            |     |            |       |            |            |     |    |    |
|    | "  | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d.  | "  |    |



|        |    | 8In        | d.  | Tang       | d.  | Coig       | Coa        | d.  |    |    |
|--------|----|------------|-----|------------|-----|------------|------------|-----|----|----|
|        | 0  | 9.657 0163 | 411 | 9.707 1659 | 410 | 9.758 3111 | 9.809 8809 | 107 | 0  | 60 |
| 500    | 10 | 9.657 0281 | 411 | 9.707 1777 | 410 | 9.758 3229 | 9.809 8927 | 108 | 50 |    |
| 1.000  | 20 | 9.657 1399 | 411 | 9.707 1895 | 410 | 9.758 3347 | 9.809 8945 | 107 | 40 |    |
| 1.500  | 30 | 9.657 1517 | 411 | 9.707 1913 | 410 | 9.758 3465 | 9.809 8963 | 107 | 30 |    |
| 2.000  | 40 | 9.657 1635 | 411 | 9.707 1931 | 410 | 9.758 3583 | 9.809 8981 | 108 | 20 |    |
| 2.500  | 50 | 9.657 1753 | 411 | 9.707 1949 | 410 | 9.758 3701 | 9.809 8999 | 107 | 10 |    |
| 3.000  | 0  | 9.657 1871 | 411 | 9.707 1967 | 410 | 9.758 3819 | 9.809 9017 | 107 | 0  | 59 |
| 3.500  | 10 | 9.657 1989 | 411 | 9.707 1985 | 410 | 9.758 3937 | 9.809 9035 | 108 | 50 |    |
| 4.000  | 20 | 9.657 2107 | 411 | 9.707 2003 | 410 | 9.758 4055 | 9.809 9053 | 107 | 40 |    |
| 4.500  | 30 | 9.657 2225 | 411 | 9.707 2021 | 410 | 9.758 4173 | 9.809 9071 | 108 | 30 |    |
| 5.000  | 40 | 9.657 2343 | 411 | 9.707 2039 | 410 | 9.758 4291 | 9.809 9089 | 107 | 20 |    |
| 5.500  | 50 | 9.657 2461 | 411 | 9.707 2057 | 410 | 9.758 4409 | 9.809 9107 | 107 | 10 |    |
| 6.000  | 0  | 9.657 2579 | 411 | 9.707 2075 | 410 | 9.758 4527 | 9.809 9125 | 108 | 0  | 58 |
| 6.500  | 10 | 9.657 2697 | 411 | 9.707 2093 | 410 | 9.758 4645 | 9.809 9143 | 107 | 50 |    |
| 7.000  | 20 | 9.657 2815 | 411 | 9.707 2111 | 410 | 9.758 4763 | 9.809 9161 | 108 | 40 |    |
| 7.500  | 30 | 9.657 2933 | 411 | 9.707 2129 | 410 | 9.758 4881 | 9.809 9179 | 107 | 30 |    |
| 8.000  | 40 | 9.657 3051 | 411 | 9.707 2147 | 410 | 9.758 4999 | 9.809 9197 | 108 | 20 |    |
| 8.500  | 50 | 9.657 3169 | 411 | 9.707 2165 | 410 | 9.758 5117 | 9.809 9215 | 107 | 10 |    |
| 9.000  | 0  | 9.657 3287 | 411 | 9.707 2183 | 410 | 9.758 5235 | 9.809 9233 | 108 | 0  | 57 |
| 9.500  | 10 | 9.657 3405 | 411 | 9.707 2201 | 410 | 9.758 5353 | 9.809 9251 | 107 | 50 |    |
| 10.000 | 20 | 9.657 3523 | 411 | 9.707 2219 | 410 | 9.758 5471 | 9.809 9269 | 108 | 40 |    |
| 10.500 | 30 | 9.657 3641 | 411 | 9.707 2237 | 410 | 9.758 5589 | 9.809 9287 | 107 | 30 |    |
| 11.000 | 40 | 9.657 3759 | 411 | 9.707 2255 | 410 | 9.758 5707 | 9.809 9305 | 108 | 20 |    |
| 11.500 | 50 | 9.657 3877 | 411 | 9.707 2273 | 410 | 9.758 5825 | 9.809 9323 | 107 | 10 |    |
| 12.000 | 0  | 9.657 3995 | 411 | 9.707 2291 | 410 | 9.758 5943 | 9.809 9341 | 108 | 0  | 56 |
| 12.500 | 10 | 9.657 4113 | 411 | 9.707 2309 | 410 | 9.758 6061 | 9.809 9359 | 107 | 50 |    |
| 13.000 | 20 | 9.657 4231 | 411 | 9.707 2327 | 410 | 9.758 6179 | 9.809 9377 | 108 | 40 |    |
| 13.500 | 30 | 9.657 4349 | 411 | 9.707 2345 | 410 | 9.758 6297 | 9.809 9395 | 107 | 30 |    |
| 14.000 | 40 | 9.657 4467 | 411 | 9.707 2363 | 410 | 9.758 6415 | 9.809 9413 | 108 | 20 |    |
| 14.500 | 50 | 9.657 4585 | 411 | 9.707 2381 | 410 | 9.758 6533 | 9.809 9431 | 107 | 10 |    |
| 15.000 | 0  | 9.657 4703 | 411 | 9.707 2399 | 410 | 9.758 6651 | 9.809 9449 | 108 | 0  | 55 |
| 15.500 | 10 | 9.657 4821 | 411 | 9.707 2417 | 410 | 9.758 6769 | 9.809 9467 | 107 | 50 |    |
| 16.000 | 20 | 9.657 4939 | 411 | 9.707 2435 | 410 | 9.758 6887 | 9.809 9485 | 108 | 40 |    |
| 16.500 | 30 | 9.657 5057 | 411 | 9.707 2453 | 410 | 9.758 7005 | 9.809 9503 | 107 | 30 |    |
| 17.000 | 40 | 9.657 5175 | 411 | 9.707 2471 | 410 | 9.758 7123 | 9.809 9521 | 108 | 20 |    |
| 17.500 | 50 | 9.657 5293 | 411 | 9.707 2489 | 410 | 9.758 7241 | 9.809 9539 | 107 | 10 |    |
| 18.000 | 0  | 9.657 5411 | 411 | 9.707 2507 | 410 | 9.758 7359 | 9.809 9557 | 108 | 0  | 54 |
| 18.500 | 10 | 9.657 5529 | 411 | 9.707 2525 | 410 | 9.758 7477 | 9.809 9575 | 107 | 50 |    |
| 19.000 | 20 | 9.657 5647 | 411 | 9.707 2543 | 410 | 9.758 7595 | 9.809 9593 | 108 | 40 |    |
| 19.500 | 30 | 9.657 5765 | 411 | 9.707 2561 | 410 | 9.758 7713 | 9.809 9611 | 107 | 30 |    |
| 20.000 | 40 | 9.657 5883 | 411 | 9.707 2579 | 410 | 9.758 7831 | 9.809 9629 | 108 | 20 |    |
| 20.500 | 50 | 9.657 6001 | 411 | 9.707 2597 | 410 | 9.758 7949 | 9.809 9647 | 107 | 10 |    |
| 21.000 | 0  | 9.657 6119 | 411 | 9.707 2615 | 410 | 9.758 8067 | 9.809 9665 | 108 | 0  | 53 |
| 21.500 | 10 | 9.657 6237 | 411 | 9.707 2633 | 410 | 9.758 8185 | 9.809 9683 | 107 | 50 |    |
| 22.000 | 20 | 9.657 6355 | 411 | 9.707 2651 | 410 | 9.758 8303 | 9.809 9701 | 108 | 40 |    |
| 22.500 | 30 | 9.657 6473 | 411 | 9.707 2669 | 410 | 9.758 8421 | 9.809 9719 | 107 | 30 |    |
| 23.000 | 40 | 9.657 6591 | 411 | 9.707 2687 | 410 | 9.758 8539 | 9.809 9737 | 108 | 20 |    |
| 23.500 | 50 | 9.657 6709 | 411 | 9.707 2705 | 410 | 9.758 8657 | 9.809 9755 | 107 | 10 |    |
| 24.000 | 0  | 9.657 6827 | 411 | 9.707 2723 | 410 | 9.758 8775 | 9.809 9773 | 108 | 0  | 52 |
| 24.500 | 10 | 9.657 6945 | 411 | 9.707 2741 | 410 | 9.758 8893 | 9.809 9791 | 107 | 50 |    |
| 25.000 | 20 | 9.657 7063 | 411 | 9.707 2759 | 410 | 9.758 9011 | 9.809 9809 | 108 | 40 |    |
| 25.500 | 30 | 9.657 7181 | 411 | 9.707 2777 | 410 | 9.758 9129 | 9.809 9827 | 107 | 30 |    |
| 26.000 | 40 | 9.657 7299 | 411 | 9.707 2795 | 410 | 9.758 9247 | 9.809 9845 | 108 | 20 |    |
| 26.500 | 50 | 9.657 7417 | 411 | 9.707 2813 | 410 | 9.758 9365 | 9.809 9863 | 107 | 10 |    |
| 27.000 | 0  | 9.657 7535 | 411 | 9.707 2831 | 410 | 9.758 9483 | 9.809 9881 | 108 | 0  | 51 |
| 27.500 | 10 | 9.657 7653 | 411 | 9.707 2849 | 410 | 9.758 9601 | 9.809 9899 | 107 | 50 |    |
| 28.000 | 20 | 9.657 7771 | 411 | 9.707 2867 | 410 | 9.758 9719 | 9.809 9917 | 108 | 40 |    |
| 28.500 | 30 | 9.657 7889 | 411 | 9.707 2885 | 410 | 9.758 9837 | 9.809 9935 | 107 | 30 |    |
| 29.000 | 40 | 9.657 8007 | 411 | 9.707 2903 | 410 | 9.758 9955 | 9.809 9953 | 108 | 20 |    |
| 29.500 | 50 | 9.657 8125 | 411 | 9.707 2921 | 410 | 9.758 1000 | 9.809 9971 | 107 | 10 |    |
| 30.000 | 0  | 9.657 8243 | 411 | 9.707 2939 | 410 | 9.758 1018 | 9.809 9989 | 108 | 0  | 50 |



|    | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d.  | "  |    |
|----|----|------------|-----|------------|-------|------------|------------|-----|----|----|
| 10 | 0  | 9.659 5173 | 410 | 9.710 2824 | 518   | 0.289 7176 | 9.949 2349 | 108 | 0  | 50 |
|    | 10 | 9.659 5583 | 410 | 9.710 3342 | 519   | 0.289 6658 | 9.949 2241 | 108 | 50 |    |
|    | 20 | 9.659 5993 | 410 | 9.710 3861 | 518   | 0.289 6139 | 9.949 2133 | 108 | 40 |    |
|    | 30 | 9.659 6403 | 410 | 9.710 4379 | 518   | 0.289 5621 | 9.949 2025 | 109 | 30 |    |
|    | 40 | 9.659 6813 | 410 | 9.710 4897 | 518   | 0.289 5103 | 9.949 1916 | 108 | 20 |    |
|    | 50 | 9.659 7223 | 410 | 9.710 5415 | 518   | 0.289 4585 | 9.949 1808 | 108 | 10 |    |
| 11 | 0  | 9.659 7633 | 410 | 9.710 5933 | 518   | 0.289 4067 | 9.949 1700 | 108 | 0  | 49 |
|    | 10 | 9.659 8043 | 410 | 9.710 6451 | 518   | 0.289 3549 | 9.949 1592 | 108 | 50 |    |
|    | 20 | 9.659 8453 | 410 | 9.710 6969 | 518   | 0.289 3031 | 9.949 1484 | 108 | 40 |    |
|    | 30 | 9.659 8863 | 410 | 9.710 7487 | 518   | 0.289 2513 | 9.949 1376 | 108 | 30 |    |
|    | 40 | 9.659 9273 | 410 | 9.710 8005 | 518   | 0.289 1995 | 9.949 1268 | 109 | 20 |    |
|    | 50 | 9.659 9683 | 410 | 9.710 8523 | 518   | 0.289 1477 | 9.949 1159 | 108 | 10 |    |
| 12 | 0  | 9.660 0093 | 409 | 9.710 9041 | 518   | 0.289 0959 | 9.949 1051 | 108 | 0  | 48 |
|    | 10 | 9.660 0502 | 410 | 9.710 9559 | 518   | 0.289 0441 | 9.949 0943 | 108 | 50 |    |
|    | 20 | 9.660 0912 | 409 | 9.711 0077 | 518   | 0.288 9923 | 9.949 0835 | 108 | 40 |    |
|    | 30 | 9.660 1321 | 410 | 9.711 0595 | 518   | 0.288 9405 | 9.949 0727 | 109 | 30 |    |
|    | 40 | 9.660 1731 | 410 | 9.711 1113 | 517   | 0.288 8887 | 9.949 0618 | 108 | 20 |    |
|    | 50 | 9.660 2140 | 409 | 9.711 1630 | 518   | 0.288 8370 | 9.949 0510 | 108 | 10 |    |
| 13 | 0  | 9.660 2550 | 409 | 9.711 2148 | 518   | 0.288 7852 | 9.949 0402 | 109 | 0  | 47 |
|    | 10 | 9.660 2959 | 409 | 9.711 2666 | 517   | 0.288 7334 | 9.949 0293 | 108 | 50 |    |
|    | 20 | 9.660 3368 | 410 | 9.711 3183 | 518   | 0.288 6817 | 9.949 0185 | 108 | 40 |    |
|    | 30 | 9.660 3778 | 409 | 9.711 3701 | 518   | 0.288 6299 | 9.949 0077 | 109 | 30 |    |
|    | 40 | 9.660 4187 | 409 | 9.711 4219 | 517   | 0.288 5781 | 9.948 9968 | 108 | 20 |    |
|    | 50 | 9.660 4596 | 409 | 9.711 4736 | 518   | 0.288 5264 | 9.948 9860 | 108 | 10 |    |
| 14 | 0  | 9.660 5005 | 409 | 9.711 5254 | 517   | 0.288 4746 | 9.948 9752 | 109 | 0  | 46 |
|    | 10 | 9.660 5414 | 409 | 9.711 5771 | 517   | 0.288 4229 | 9.948 9643 | 108 | 50 |    |
|    | 20 | 9.660 5823 | 409 | 9.711 6288 | 518   | 0.288 3712 | 9.948 9535 | 108 | 40 |    |
|    | 30 | 9.660 6232 | 409 | 9.711 6806 | 517   | 0.288 3194 | 9.948 9427 | 109 | 30 |    |
|    | 40 | 9.660 6641 | 409 | 9.711 7323 | 517   | 0.288 2677 | 9.948 9318 | 108 | 20 |    |
|    | 50 | 9.660 7050 | 409 | 9.711 7840 | 518   | 0.288 2160 | 9.948 9210 | 109 | 10 |    |
| 15 | 0  | 9.660 7459 | 409 | 9.711 8358 | 517   | 0.288 1642 | 9.948 9101 | 108 | 0  | 45 |
|    | 10 | 9.660 7868 | 409 | 9.711 8875 | 517   | 0.288 1125 | 9.948 8993 | 109 | 50 |    |
|    | 20 | 9.660 8277 | 408 | 9.711 9392 | 517   | 0.288 0608 | 9.948 8884 | 108 | 40 |    |
|    | 30 | 9.660 8685 | 409 | 9.711 9909 | 517   | 0.288 0091 | 9.948 8776 | 109 | 30 |    |
|    | 40 | 9.660 9094 | 408 | 9.712 0426 | 517   | 0.287 9574 | 9.948 8667 | 108 | 20 |    |
|    | 50 | 9.660 9502 | 409 | 9.712 0943 | 518   | 0.287 9057 | 9.948 8559 | 109 | 10 |    |
| 16 | 0  | 9.660 9911 | 409 | 9.712 1461 | 517   | 0.287 8539 | 9.948 8450 | 108 | 0  | 44 |
|    | 10 | 9.661 0320 | 408 | 9.712 1978 | 517   | 0.287 8022 | 9.948 8342 | 109 | 50 |    |
|    | 20 | 9.661 0728 | 408 | 9.712 2495 | 517   | 0.287 7505 | 9.948 8233 | 108 | 40 |    |
|    | 30 | 9.661 1136 | 409 | 9.712 3012 | 516   | 0.287 6988 | 9.948 8125 | 109 | 30 |    |
|    | 40 | 9.661 1545 | 408 | 9.712 3528 | 517   | 0.287 6472 | 9.948 8016 | 108 | 20 |    |
|    | 50 | 9.661 1953 | 408 | 9.712 4045 | 517   | 0.287 5955 | 9.948 7908 | 109 | 10 |    |
| 17 | 0  | 9.661 2361 | 408 | 9.712 4562 | 517   | 0.287 5438 | 9.948 7799 | 108 | 0  | 43 |
|    | 10 | 9.661 2769 | 409 | 9.712 5079 | 517   | 0.287 4921 | 9.948 7691 | 109 | 50 |    |
|    | 20 | 9.661 3178 | 408 | 9.712 5596 | 516   | 0.287 4404 | 9.948 7582 | 109 | 40 |    |
|    | 30 | 9.661 3586 | 408 | 9.712 6112 | 517   | 0.287 3888 | 9.948 7473 | 108 | 30 |    |
|    | 40 | 9.661 3994 | 408 | 9.712 6629 | 517   | 0.287 3371 | 9.948 7365 | 109 | 20 |    |
|    | 50 | 9.661 4402 | 408 | 9.712 7146 | 516   | 0.287 2854 | 9.948 7256 | 109 | 10 |    |
| 18 | 0  | 9.661 4810 | 408 | 9.712 7662 | 517   | 0.287 2338 | 9.948 7147 | 108 | 0  | 42 |
|    | 10 | 9.661 5218 | 408 | 9.712 8179 | 517   | 0.287 1821 | 9.948 7039 | 109 | 50 |    |
|    | 20 | 9.661 5626 | 407 | 9.712 8696 | 516   | 0.287 1304 | 9.948 6930 | 109 | 40 |    |
|    | 30 | 9.661 6033 | 408 | 9.712 9212 | 517   | 0.287 0788 | 9.948 6821 | 108 | 30 |    |
|    | 40 | 9.661 6441 | 408 | 9.712 9729 | 516   | 0.287 0271 | 9.948 6713 | 109 | 20 |    |
|    | 50 | 9.661 6849 | 408 | 9.713 0245 | 516   | 0.286 9755 | 9.948 6604 | 109 | 10 |    |
| 19 | 0  | 9.661 7257 | 407 | 9.713 0761 | 517   | 0.286 9239 | 9.948 6495 | 109 | 0  | 41 |
|    | 10 | 9.661 7664 | 408 | 9.713 1278 | 516   | 0.286 8722 | 9.948 6386 | 108 | 50 |    |
|    | 20 | 9.661 8072 | 407 | 9.713 1794 | 517   | 0.286 8206 | 9.948 6278 | 109 | 40 |    |
|    | 30 | 9.661 8479 | 408 | 9.713 2311 | 516   | 0.286 7689 | 9.948 6169 | 109 | 30 |    |
|    | 40 | 9.661 8887 | 407 | 9.713 2827 | 516   | 0.286 7173 | 9.948 6060 | 109 | 20 |    |
|    | 50 | 9.661 9294 | 408 | 9.713 3343 | 516   | 0.286 6657 | 9.948 5951 | 109 | 10 |    |
| 20 | 0  | 9.661 9702 | 408 | 9.713 3859 | 516   | 0.286 6141 | 9.948 5842 | 109 | 0  | 40 |
|    |    |            |     |            |       |            |            |     |    |    |
|    | "  | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d.  | "  |    |

517

1 51.7  
2 103.4  
3 155.1  
4 206.8  
5 258.5  
6 310.2  
7 361.9  
8 413.6  
9 465.3

516

1 51.6  
2 103.2  
3 154.8  
4 206.4  
5 258.0  
6 309.6  
7 361.2  
8 412.8  
9 464.4

411

1 41.1  
2 82.1  
3 123.3  
4 164.4  
5 205.5  
6 246.6  
7 287.7  
8 328.8  
9 369.9

409

1 40.9  
2 81.8  
3 122.7  
4 163.6  
5 204.5  
6 245.4  
7 286.3  
8 327.2  
9 368.1

408

1 40.8  
2 81.6  
3 122.4  
4 163.2  
5 204.0  
6 244.8  
7 285.6  
8 326.4  
9 367.2

109

1 10.9  
2 21.8  
3 32.7  
4 43.6  
5 54.5  
6 65.4  
7 76.3  
8 87.2  
9 98.1



|          |    |            | Sin | d.         | Tang | d. c.      | Cotg       | Con | d. |    |  |
|----------|----|------------|-----|------------|------|------------|------------|-----|----|----|--|
| 516      | 0  | 9.661 9702 | 407 | 9.713 3859 | 516  | 0.286 6141 | 9.948 5812 | 109 | 0  | 40 |  |
| 1) 51.6  | 10 | 9.662 0109 | 407 | 9.713 3375 | 517  | 0.286 5655 | 9.948 5741 | 108 | 50 |    |  |
| 2) 101.2 | 20 | 9.662 0516 | 407 | 9.713 3892 | 516  | 0.286 5169 | 9.948 5665 | 109 | 40 |    |  |
| 3) 151.8 | 30 | 9.662 0923 | 407 | 9.713 3408 | 516  | 0.286 4683 | 9.948 5510 | 109 | 30 |    |  |
| 4) 202.4 | 40 | 9.662 1331 | 407 | 9.713 3924 | 516  | 0.286 4197 | 9.948 5407 | 109 | 20 |    |  |
| 5) 253.0 | 50 | 9.662 1738 | 407 | 9.713 3440 | 516  | 0.286 3711 | 9.948 5298 | 109 | 10 |    |  |
| 6) 303.6 | 0  | 9.662 2145 | 407 | 9.713 3956 | 516  | 0.286 3225 | 9.948 5189 | 109 | 0  | 39 |  |
| 7) 354.2 | 10 | 9.662 2552 | 407 | 9.713 3472 | 516  | 0.286 2739 | 9.948 5080 | 109 | 50 |    |  |
| 8) 404.8 | 20 | 9.662 2959 | 407 | 9.713 3988 | 516  | 0.286 2253 | 9.948 4971 | 109 | 40 |    |  |
| 9) 455.4 | 30 | 9.662 3366 | 407 | 9.713 3504 | 515  | 0.286 1767 | 9.948 4862 | 109 | 30 |    |  |
|          | 40 | 9.662 3773 | 407 | 9.713 3520 | 516  | 0.286 1281 | 9.948 4753 | 109 | 20 |    |  |
|          | 50 | 9.662 4179 | 407 | 9.713 3536 | 516  | 0.286 1165 | 9.948 4644 | 109 | 10 |    |  |
| 515      | 0  | 9.662 4586 | 407 | 9.713 3552 | 516  | 0.285 9949 | 9.948 4535 | 109 | 0  | 38 |  |
| 1) 51.5  | 10 | 9.662 4993 | 407 | 9.713 3567 | 515  | 0.285 9111 | 9.948 4426 | 109 | 50 |    |  |
| 2) 101.1 | 20 | 9.662 5400 | 407 | 9.713 3583 | 515  | 0.285 8273 | 9.948 4317 | 109 | 40 |    |  |
| 3) 151.7 | 30 | 9.662 5806 | 407 | 9.713 3599 | 516  | 0.285 7435 | 9.948 4208 | 109 | 30 |    |  |
| 4) 202.3 | 40 | 9.662 6213 | 407 | 9.713 3614 | 515  | 0.285 6597 | 9.948 4099 | 109 | 20 |    |  |
| 5) 252.9 | 50 | 9.662 6620 | 407 | 9.713 3630 | 516  | 0.285 5759 | 9.948 3990 | 109 | 10 |    |  |
| 6) 303.5 | 0  | 9.662 7026 | 407 | 9.713 3645 | 515  | 0.285 4921 | 9.948 3881 | 109 | 0  | 37 |  |
| 7) 354.1 | 10 | 9.662 7433 | 407 | 9.713 3661 | 516  | 0.285 4083 | 9.948 3772 | 109 | 50 |    |  |
| 8) 404.7 | 20 | 9.662 7839 | 407 | 9.713 3676 | 515  | 0.285 3245 | 9.948 3663 | 109 | 40 |    |  |
| 9) 455.3 | 30 | 9.662 8246 | 407 | 9.713 3692 | 516  | 0.285 2407 | 9.948 3554 | 109 | 30 |    |  |
|          | 40 | 9.662 8653 | 407 | 9.713 3707 | 515  | 0.285 1569 | 9.948 3445 | 109 | 20 |    |  |
|          | 50 | 9.662 9059 | 407 | 9.713 3723 | 515  | 0.285 1131 | 9.948 3336 | 109 | 10 |    |  |
| 514      | 0  | 9.662 9466 | 407 | 9.713 3738 | 516  | 0.285 1164 | 9.948 3227 | 109 | 0  | 36 |  |
| 1) 51.4  | 10 | 9.662 9873 | 407 | 9.713 3754 | 515  | 0.285 1127 | 9.948 3118 | 109 | 50 |    |  |
| 2) 101.0 | 20 | 9.663 0279 | 407 | 9.713 3769 | 515  | 0.285 1127 | 9.948 3009 | 109 | 40 |    |  |
| 3) 151.6 | 30 | 9.663 0686 | 407 | 9.713 3784 | 516  | 0.285 1127 | 9.948 2900 | 109 | 30 |    |  |
| 4) 202.2 | 40 | 9.663 1093 | 407 | 9.713 3799 | 515  | 0.285 1127 | 9.948 2791 | 109 | 20 |    |  |
| 5) 252.8 | 50 | 9.663 1499 | 407 | 9.713 3814 | 515  | 0.285 1127 | 9.948 2682 | 109 | 10 |    |  |
| 6) 303.4 | 0  | 9.663 1906 | 407 | 9.713 3829 | 515  | 0.285 1127 | 9.948 2573 | 109 | 0  | 35 |  |
| 7) 354.0 | 10 | 9.663 2313 | 407 | 9.713 3844 | 515  | 0.285 1127 | 9.948 2464 | 109 | 50 |    |  |
| 8) 404.6 | 20 | 9.663 2719 | 407 | 9.713 3859 | 515  | 0.285 1127 | 9.948 2355 | 109 | 40 |    |  |
| 9) 455.2 | 30 | 9.663 3126 | 407 | 9.713 3874 | 515  | 0.285 1127 | 9.948 2246 | 109 | 30 |    |  |
|          | 40 | 9.663 3533 | 407 | 9.713 3889 | 515  | 0.285 1127 | 9.948 2137 | 109 | 20 |    |  |
|          | 50 | 9.663 3939 | 407 | 9.713 3904 | 515  | 0.285 1127 | 9.948 2028 | 109 | 10 |    |  |
| 407      | 0  | 9.663 4346 | 407 | 9.713 3919 | 515  | 0.285 1127 | 9.948 1919 | 109 | 0  | 34 |  |
| 1) 40.7  | 10 | 9.663 4753 | 407 | 9.713 3934 | 515  | 0.285 1127 | 9.948 1810 | 109 | 50 |    |  |
| 2) 90.3  | 20 | 9.663 5159 | 407 | 9.713 3949 | 515  | 0.285 1127 | 9.948 1701 | 109 | 40 |    |  |
| 3) 140.9 | 30 | 9.663 5566 | 407 | 9.713 3964 | 515  | 0.285 1127 | 9.948 1592 | 109 | 30 |    |  |
| 4) 191.5 | 40 | 9.663 5973 | 407 | 9.713 3979 | 515  | 0.285 1127 | 9.948 1483 | 109 | 20 |    |  |
| 5) 242.1 | 50 | 9.663 6379 | 407 | 9.713 3994 | 515  | 0.285 1127 | 9.948 1374 | 109 | 10 |    |  |
| 6) 292.7 | 0  | 9.663 6786 | 407 | 9.713 4009 | 515  | 0.285 1127 | 9.948 1265 | 109 | 0  | 33 |  |
| 7) 343.3 | 10 | 9.663 7193 | 407 | 9.713 4024 | 515  | 0.285 1127 | 9.948 1156 | 109 | 50 |    |  |
| 8) 393.9 | 20 | 9.663 7599 | 407 | 9.713 4039 | 515  | 0.285 1127 | 9.948 1047 | 109 | 40 |    |  |
| 9) 444.5 | 30 | 9.663 8006 | 407 | 9.713 4054 | 515  | 0.285 1127 | 9.948 938  | 109 | 30 |    |  |
|          | 40 | 9.663 8413 | 407 | 9.713 4069 | 515  | 0.285 1127 | 9.948 829  | 109 | 20 |    |  |
|          | 50 | 9.663 8819 | 407 | 9.713 4084 | 515  | 0.285 1127 | 9.948 720  | 109 | 10 |    |  |
| 406      | 0  | 9.663 9226 | 407 | 9.713 4099 | 515  | 0.285 1127 | 9.948 611  | 109 | 0  | 32 |  |
| 1) 40.6  | 10 | 9.663 9633 | 407 | 9.713 4114 | 515  | 0.285 1127 | 9.948 502  | 109 | 50 |    |  |
| 2) 90.2  | 20 | 9.664 0039 | 407 | 9.713 4129 | 515  | 0.285 1127 | 9.948 393  | 109 | 40 |    |  |
| 3) 140.8 | 30 | 9.664 0446 | 407 | 9.713 4144 | 515  | 0.285 1127 | 9.948 284  | 109 | 30 |    |  |
| 4) 191.4 | 40 | 9.664 0853 | 407 | 9.713 4159 | 515  | 0.285 1127 | 9.948 175  | 109 | 20 |    |  |
| 5) 242.0 | 50 | 9.664 1259 | 407 | 9.713 4174 | 515  | 0.285 1127 | 9.948 66   | 109 | 10 |    |  |
| 6) 292.6 | 0  | 9.664 1666 | 407 | 9.713 4189 | 515  | 0.285 1127 | 9.948 57   | 109 | 0  | 31 |  |
| 7) 343.2 | 10 | 9.664 2073 | 407 | 9.713 4204 | 515  | 0.285 1127 | 9.948 46   | 109 | 50 |    |  |
| 8) 393.8 | 20 | 9.664 2479 | 407 | 9.713 4219 | 515  | 0.285 1127 | 9.948 35   | 109 | 40 |    |  |
| 9) 444.4 | 30 | 9.664 2886 | 407 | 9.713 4234 | 515  | 0.285 1127 | 9.948 24   | 109 | 30 |    |  |
|          | 40 | 9.664 3293 | 407 | 9.713 4249 | 515  | 0.285 1127 | 9.948 13   | 109 | 20 |    |  |
|          | 50 | 9.664 3699 | 407 | 9.713 4264 | 515  | 0.285 1127 | 9.948 2    | 109 | 10 |    |  |
| 100      | 0  | 9.664 4106 | 407 | 9.713 4279 | 515  | 0.285 1127 | 9.948 51   | 109 | 0  | 30 |  |
| 1) 10.0  | 10 | 9.664 4513 | 407 | 9.713 4294 | 515  | 0.285 1127 | 9.948 40   | 109 | 50 |    |  |
| 2) 60.6  | 20 | 9.664 4919 | 407 | 9.713 4309 | 515  | 0.285 1127 | 9.948 29   | 109 | 40 |    |  |
| 3) 111.2 | 30 | 9.664 5326 | 407 | 9.713 4324 | 515  | 0.285 1127 | 9.948 18   | 109 | 30 |    |  |
| 4) 161.8 | 40 | 9.664 5733 | 407 | 9.713 4339 | 515  | 0.285 1127 | 9.948 7    | 109 | 20 |    |  |
| 5) 212.4 | 50 | 9.664 6139 | 407 | 9.713 4354 | 515  | 0.285 1127 | 9.948 56   | 109 | 10 |    |  |
| 6) 263.0 | 0  | 9.664 6546 | 407 | 9.713 4369 | 515  | 0.285 1127 | 9.948 45   | 109 | 0  | 29 |  |
| 7) 313.6 | 10 | 9.664 6953 | 407 | 9.713 4384 | 515  | 0.285 1127 | 9.948 34   | 109 | 50 |    |  |
| 8) 364.2 | 20 | 9.664 7359 | 407 | 9.713 4399 | 515  | 0.285 1127 | 9.948 23   | 109 | 40 |    |  |
| 9) 414.8 | 30 | 9.664 7766 | 407 | 9.713 4414 | 515  | 0.285 1127 | 9.948 12   | 109 | 30 |    |  |
|          | 40 | 9.664 8173 | 407 | 9.713 4429 | 515  | 0.285 1127 | 9.948 1    | 109 | 20 |    |  |
|          | 50 | 9.664 8579 | 407 | 9.713 4444 | 515  | 0.285 1127 | 9.948 50   | 109 | 10 |    |  |
|          | 0  | 9.664 8986 | 407 | 9.713 4459 | 515  | 0.285 1127 | 9.948 39   | 109 | 0  | 28 |  |
|          |    |            | Con | d.         | Cotg | d. c.      | Tang       | Sin | d. |    |  |



|    | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d.  | "  |    |
|----|----|------------|-----|------------|-------|------------|------------|-----|----|----|
| 30 | 0  | 9.664 4056 | 404 | 9.716 4767 | 514   | 0.283 5233 | 9.947 9289 | 109 | 0  | 30 |
|    | 10 | 9.664 4460 | 405 | 9.716 5281 | 514   | 0.283 4719 | 9.947 9180 | 110 | 50 |    |
|    | 20 | 9.664 4865 | 405 | 9.716 5795 | 514   | 0.283 4205 | 9.947 9070 | 110 | 40 |    |
|    | 30 | 9.664 5269 | 404 | 9.716 6309 | 514   | 0.283 3691 | 9.947 8960 | 109 | 30 |    |
|    | 40 | 9.664 5673 | 405 | 9.716 6823 | 514   | 0.283 3177 | 9.947 8851 | 110 | 20 |    |
|    | 50 | 9.664 6078 | 404 | 9.716 7337 | 514   | 0.283 2663 | 9.947 8741 | 110 | 10 |    |
| 31 | 0  | 9.664 6482 | 404 | 9.716 7851 | 513   | 0.283 2149 | 9.947 8631 | 109 | 0  | 29 |
|    | 10 | 9.664 6886 | 404 | 9.716 8364 | 514   | 0.283 1636 | 9.947 8522 | 110 | 50 |    |
|    | 20 | 9.664 7290 | 404 | 9.716 8878 | 514   | 0.283 1122 | 9.947 8412 | 110 | 40 |    |
|    | 30 | 9.664 7694 | 404 | 9.716 9392 | 514   | 0.283 0608 | 9.947 8302 | 109 | 30 |    |
|    | 40 | 9.664 8098 | 404 | 9.716 9906 | 513   | 0.283 0094 | 9.947 8193 | 110 | 20 |    |
|    | 50 | 9.664 8502 | 404 | 9.717 0419 | 514   | 0.282 9581 | 9.947 8083 | 110 | 10 |    |
| 32 | 0  | 9.664 8906 | 404 | 9.717 0933 | 514   | 0.282 9067 | 9.947 7973 | 110 | 0  | 28 |
|    | 10 | 9.664 9310 | 404 | 9.717 1447 | 513   | 0.282 8553 | 9.947 7863 | 110 | 50 |    |
|    | 20 | 9.664 9714 | 404 | 9.717 1960 | 514   | 0.282 8040 | 9.947 7753 | 109 | 40 |    |
|    | 30 | 9.665 0118 | 404 | 9.717 2474 | 514   | 0.282 7526 | 9.947 7644 | 110 | 30 |    |
|    | 40 | 9.665 0521 | 403 | 9.717 2987 | 513   | 0.282 7013 | 9.947 7534 | 110 | 20 |    |
|    | 50 | 9.665 0925 | 404 | 9.717 3501 | 513   | 0.282 6499 | 9.947 7424 | 110 | 10 |    |
| 33 | 0  | 9.665 1329 | 403 | 9.717 4014 | 514   | 0.282 5986 | 9.947 7314 | 110 | 0  | 27 |
|    | 10 | 9.665 1732 | 404 | 9.717 4528 | 513   | 0.282 5472 | 9.947 7204 | 109 | 50 |    |
|    | 20 | 9.665 2136 | 403 | 9.717 5041 | 514   | 0.282 4959 | 9.947 7095 | 110 | 40 |    |
|    | 30 | 9.665 2539 | 404 | 9.717 5555 | 513   | 0.282 4445 | 9.947 6985 | 110 | 30 |    |
|    | 40 | 9.665 2943 | 403 | 9.717 6068 | 513   | 0.282 3932 | 9.947 6875 | 110 | 20 |    |
|    | 50 | 9.665 3346 | 403 | 9.717 6581 | 513   | 0.282 3419 | 9.947 6765 | 110 | 10 |    |
| 34 | 0  | 9.665 3749 | 403 | 9.717 7094 | 514   | 0.282 2906 | 9.947 6655 | 110 | 0  | 26 |
|    | 10 | 9.665 4153 | 403 | 9.717 7608 | 513   | 0.282 2392 | 9.947 6545 | 110 | 50 |    |
|    | 20 | 9.665 4556 | 403 | 9.717 8121 | 513   | 0.282 1879 | 9.947 6435 | 110 | 40 |    |
|    | 30 | 9.665 4959 | 403 | 9.717 8634 | 513   | 0.282 1366 | 9.947 6325 | 110 | 30 |    |
|    | 40 | 9.665 5362 | 403 | 9.717 9147 | 513   | 0.282 0853 | 9.947 6215 | 110 | 20 |    |
|    | 50 | 9.665 5765 | 403 | 9.717 9660 | 513   | 0.282 0340 | 9.947 6105 | 110 | 10 |    |
| 35 | 0  | 9.665 6168 | 403 | 9.718 0173 | 513   | 0.281 9827 | 9.947 5995 | 110 | 0  | 25 |
|    | 10 | 9.665 6571 | 403 | 9.718 0686 | 513   | 0.281 9314 | 9.947 5885 | 110 | 50 |    |
|    | 20 | 9.665 6974 | 403 | 9.718 1199 | 513   | 0.281 8801 | 9.947 5775 | 110 | 40 |    |
|    | 30 | 9.665 7377 | 403 | 9.718 1712 | 513   | 0.281 8288 | 9.947 5665 | 110 | 30 |    |
|    | 40 | 9.665 7780 | 403 | 9.718 2225 | 513   | 0.281 7775 | 9.947 5555 | 110 | 20 |    |
|    | 50 | 9.665 8183 | 403 | 9.718 2738 | 513   | 0.281 7262 | 9.947 5445 | 110 | 10 |    |
| 36 | 0  | 9.665 8586 | 403 | 9.718 3251 | 513   | 0.281 6749 | 9.947 5335 | 110 | 0  | 24 |
|    | 10 | 9.665 8989 | 402 | 9.718 3764 | 512   | 0.281 6236 | 9.947 5225 | 110 | 50 |    |
|    | 20 | 9.665 9391 | 403 | 9.718 4276 | 513   | 0.281 5724 | 9.947 5115 | 110 | 40 |    |
|    | 30 | 9.665 9794 | 402 | 9.718 4789 | 513   | 0.281 5211 | 9.947 5005 | 110 | 30 |    |
|    | 40 | 9.666 0196 | 403 | 9.718 5302 | 513   | 0.281 4698 | 9.947 4895 | 110 | 20 |    |
|    | 50 | 9.666 0599 | 402 | 9.718 5815 | 512   | 0.281 4185 | 9.947 4784 | 110 | 10 |    |
| 37 | 0  | 9.666 1001 | 402 | 9.718 6327 | 513   | 0.281 3673 | 9.947 4674 | 110 | 0  | 23 |
|    | 10 | 9.666 1404 | 402 | 9.718 6840 | 512   | 0.281 3160 | 9.947 4564 | 110 | 50 |    |
|    | 20 | 9.666 1806 | 403 | 9.718 7352 | 513   | 0.281 2648 | 9.947 4454 | 110 | 40 |    |
|    | 30 | 9.666 2209 | 402 | 9.718 7865 | 512   | 0.281 2135 | 9.947 4344 | 110 | 30 |    |
|    | 40 | 9.666 2611 | 402 | 9.718 8377 | 513   | 0.281 1623 | 9.947 4234 | 110 | 20 |    |
|    | 50 | 9.666 3013 | 402 | 9.718 8890 | 512   | 0.281 1110 | 9.947 4123 | 110 | 10 |    |
| 38 | 0  | 9.666 3415 | 403 | 9.718 9402 | 513   | 0.281 0598 | 9.947 4013 | 110 | 0  | 22 |
|    | 10 | 9.666 3818 | 402 | 9.718 9915 | 512   | 0.281 0085 | 9.947 3903 | 110 | 50 |    |
|    | 20 | 9.666 4220 | 402 | 9.719 0427 | 512   | 0.280 9573 | 9.947 3793 | 110 | 40 |    |
|    | 30 | 9.666 4622 | 402 | 9.719 0939 | 513   | 0.280 9061 | 9.947 3682 | 110 | 30 |    |
|    | 40 | 9.666 5024 | 402 | 9.719 1452 | 512   | 0.280 8548 | 9.947 3572 | 110 | 20 |    |
|    | 50 | 9.666 5426 | 402 | 9.719 1964 | 512   | 0.280 8036 | 9.947 3462 | 110 | 10 |    |
| 39 | 0  | 9.666 5828 | 401 | 9.719 2476 | 512   | 0.280 7524 | 9.947 3352 | 110 | 0  | 21 |
|    | 10 | 9.666 6229 | 402 | 9.719 2988 | 512   | 0.280 7012 | 9.947 3241 | 110 | 50 |    |
|    | 20 | 9.666 6631 | 402 | 9.719 3500 | 513   | 0.280 6500 | 9.947 3131 | 110 | 40 |    |
|    | 30 | 9.666 7033 | 402 | 9.719 4013 | 512   | 0.280 5987 | 9.947 3021 | 110 | 30 |    |
|    | 40 | 9.666 7435 | 401 | 9.719 4525 | 512   | 0.280 5475 | 9.947 2910 | 110 | 20 |    |
|    | 50 | 9.666 7836 | 402 | 9.719 5037 | 512   | 0.280 4963 | 9.947 2800 | 110 | 10 |    |
| 40 | 0  | 9.666 8238 | 402 | 9.719 5549 | 512   | 0.280 4451 | 9.947 2689 | 110 | 0  | 20 |
|    |    |            |     |            |       |            |            |     |    |    |
|    | "  | Cos        | d.  | Cotg       | d. c. | Tang       |            | d.  | "  |    |

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1 51.3

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4 205.2

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8 410.4

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512

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405

1 40.5

2 81.0

3 121.5

4 162.0

5 202.5

6 243.0

7 283.5

8 324.0

9 364.5

404

1 40.4

2 80.8

3 121.2

4 161.6

5 202.0

6 242.4

7 282.8

8 323.2

9 363.6

403

1 40.3

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4 161.3

5 201.7

6 242.1

7 282.5

8 322.9

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110

1 11.0

2 22.0

3 33.0

4 44.0

5 55.0

6 66.0

7 77.0

8 88.0

9 99.0







|    | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d.  | "  |    |
|----|----|------------|-----|------------|-------|------------|------------|-----|----|----|
| 50 | 0  | 9.669 2250 | 399 | 9.722 6207 | 510   | 0.277 3793 | 9.946 6043 | 111 | 0  | 10 |
|    | 10 | 9.669 2649 | 398 | 9.722 6717 | 510   | 0.277 3283 | 9.946 5932 | 111 | 50 |    |
|    | 20 | 9.669 3047 | 399 | 9.722 7227 | 510   | 0.277 2773 | 9.946 5821 | 112 | 40 |    |
|    | 30 | 9.669 3446 | 399 | 9.722 7737 | 509   | 0.277 2263 | 9.946 5709 | 111 | 30 |    |
|    | 40 | 9.669 3845 | 398 | 9.722 8246 | 510   | 0.277 1754 | 9.946 5598 | 111 | 20 |    |
|    | 50 | 9.669 4243 | 399 | 9.722 8756 | 510   | 0.277 1244 | 9.946 5487 | 111 | 10 |    |
| 51 | 0  | 9.669 4642 | 398 | 9.722 9266 | 510   | 0.277 0734 | 9.946 5376 | 112 | 0  | 9  |
|    | 10 | 9.669 5040 | 399 | 9.722 9776 | 509   | 0.277 0224 | 9.946 5264 | 111 | 50 |    |
|    | 20 | 9.669 5439 | 398 | 9.723 0285 | 510   | 0.276 9715 | 9.946 5153 | 111 | 40 |    |
|    | 30 | 9.669 5837 | 398 | 9.723 0795 | 510   | 0.276 9205 | 9.946 5042 | 111 | 30 |    |
|    | 40 | 9.669 6235 | 399 | 9.723 1305 | 509   | 0.276 8695 | 9.946 4931 | 112 | 20 |    |
|    | 50 | 9.669 6634 | 398 | 9.723 1814 | 510   | 0.276 8186 | 9.946 4819 | 111 | 10 |    |
| 52 | 0  | 9.669 7032 | 398 | 9.723 2324 | 509   | 0.276 7676 | 9.946 4708 | 111 | 0  | 8  |
|    | 10 | 9.669 7430 | 398 | 9.723 2833 | 510   | 0.276 7167 | 9.946 4597 | 112 | 50 |    |
|    | 20 | 9.669 7828 | 398 | 9.723 3343 | 509   | 0.276 6657 | 9.946 4485 | 111 | 40 |    |
|    | 30 | 9.669 8226 | 398 | 9.723 3852 | 510   | 0.276 6148 | 9.946 4374 | 111 | 30 |    |
|    | 40 | 9.669 8624 | 398 | 9.723 4362 | 509   | 0.276 5638 | 9.946 4263 | 112 | 20 |    |
|    | 50 | 9.669 9022 | 398 | 9.723 4871 | 510   | 0.276 5129 | 9.946 4151 | 111 | 10 |    |
| 53 | 0  | 9.669 9420 | 398 | 9.723 5381 | 509   | 0.276 4619 | 9.946 4040 | 112 | 0  | 7  |
|    | 10 | 9.669 9818 | 398 | 9.723 5890 | 509   | 0.276 4110 | 9.946 3928 | 111 | 50 |    |
|    | 20 | 9.670 0216 | 398 | 9.723 6399 | 510   | 0.276 3601 | 9.946 3817 | 112 | 40 |    |
|    | 30 | 9.670 0614 | 398 | 9.723 6909 | 509   | 0.276 3091 | 9.946 3705 | 111 | 30 |    |
|    | 40 | 9.670 1012 | 397 | 9.723 7418 | 509   | 0.276 2582 | 9.946 3594 | 111 | 20 |    |
|    | 50 | 9.670 1409 | 398 | 9.723 7927 | 509   | 0.276 2073 | 9.946 3483 | 112 | 10 |    |
| 54 | 0  | 9.670 1807 | 398 | 9.723 8436 | 509   | 0.276 1564 | 9.946 3371 | 111 | 0  | 6  |
|    | 10 | 9.670 2205 | 397 | 9.723 8945 | 509   | 0.276 1055 | 9.946 3260 | 112 | 50 |    |
|    | 20 | 9.670 2602 | 398 | 9.723 9454 | 509   | 0.276 0546 | 9.946 3148 | 111 | 40 |    |
|    | 30 | 9.670 3000 | 397 | 9.723 9963 | 509   | 0.276 0037 | 9.946 3037 | 112 | 30 |    |
|    | 40 | 9.670 3397 | 398 | 9.724 0472 | 509   | 0.275 9528 | 9.946 2925 | 111 | 20 |    |
|    | 50 | 9.670 3795 | 397 | 9.724 0981 | 509   | 0.275 9019 | 9.946 2814 | 112 | 10 |    |
| 55 | 0  | 9.670 4192 | 398 | 9.724 1490 | 509   | 0.275 8510 | 9.946 2702 | 112 | 0  | 5  |
|    | 10 | 9.670 4590 | 397 | 9.724 1999 | 509   | 0.275 8001 | 9.946 2590 | 111 | 50 |    |
|    | 20 | 9.670 4987 | 397 | 9.724 2508 | 509   | 0.275 7492 | 9.946 2479 | 112 | 40 |    |
|    | 30 | 9.670 5384 | 397 | 9.724 3017 | 509   | 0.275 6983 | 9.946 2367 | 111 | 30 |    |
|    | 40 | 9.670 5781 | 398 | 9.724 3526 | 509   | 0.275 6474 | 9.946 2256 | 112 | 20 |    |
|    | 50 | 9.670 6179 | 397 | 9.724 4035 | 508   | 0.275 5965 | 9.946 2144 | 112 | 10 |    |
| 56 | 0  | 9.670 6576 | 397 | 9.724 4543 | 509   | 0.275 5457 | 9.946 2032 | 111 | 0  | 4  |
|    | 10 | 9.670 6973 | 397 | 9.724 5052 | 509   | 0.275 4948 | 9.946 1921 | 112 | 50 |    |
|    | 20 | 9.670 7370 | 397 | 9.724 5561 | 508   | 0.275 4439 | 9.946 1809 | 112 | 40 |    |
|    | 30 | 9.670 7767 | 397 | 9.724 6069 | 509   | 0.275 3931 | 9.946 1697 | 111 | 30 |    |
|    | 40 | 9.670 8164 | 397 | 9.724 6578 | 509   | 0.275 3422 | 9.946 1586 | 112 | 20 |    |
|    | 50 | 9.670 8561 | 397 | 9.724 7087 | 508   | 0.275 2913 | 9.946 1474 | 112 | 10 |    |
| 57 | 0  | 9.670 8958 | 396 | 9.724 7595 | 509   | 0.275 2405 | 9.946 1362 | 111 | 0  | 3  |
|    | 10 | 9.670 9354 | 397 | 9.724 8104 | 508   | 0.275 1896 | 9.946 1251 | 112 | 50 |    |
|    | 20 | 9.670 9751 | 397 | 9.724 8612 | 509   | 0.275 1388 | 9.946 1139 | 112 | 40 |    |
|    | 30 | 9.671 0148 | 396 | 9.724 9121 | 508   | 0.275 0879 | 9.946 1027 | 112 | 30 |    |
|    | 40 | 9.671 0544 | 397 | 9.724 9629 | 509   | 0.275 0371 | 9.946 0915 | 111 | 20 |    |
|    | 50 | 9.671 0941 | 397 | 9.725 0138 | 508   | 0.274 9862 | 9.946 0804 | 112 | 10 |    |
| 58 | 0  | 9.671 1338 | 396 | 9.725 0646 | 508   | 0.274 9354 | 9.946 0692 | 112 | 0  | 2  |
|    | 10 | 9.671 1734 | 397 | 9.725 1154 | 509   | 0.274 8846 | 9.946 0580 | 112 | 50 |    |
|    | 20 | 9.671 2131 | 396 | 9.725 1663 | 508   | 0.274 8337 | 9.946 0468 | 112 | 40 |    |
|    | 30 | 9.671 2527 | 397 | 9.725 2171 | 508   | 0.274 7829 | 9.946 0356 | 112 | 30 |    |
|    | 40 | 9.671 2924 | 396 | 9.725 2679 | 508   | 0.274 7321 | 9.946 0244 | 111 | 20 |    |
|    | 50 | 9.671 3320 | 396 | 9.725 3187 | 508   | 0.274 6813 | 9.946 0133 | 112 | 10 |    |
| 59 | 0  | 9.671 3716 | 396 | 9.725 3695 | 509   | 0.274 6305 | 9.946 0021 | 112 | 0  | 1  |
|    | 10 | 9.671 4112 | 397 | 9.725 4204 | 508   | 0.274 5796 | 9.945 9909 | 112 | 50 |    |
|    | 20 | 9.671 4509 | 396 | 9.725 4712 | 508   | 0.274 5288 | 9.945 9797 | 112 | 40 |    |
|    | 30 | 9.671 4905 | 396 | 9.725 5220 | 508   | 0.274 4780 | 9.945 9685 | 112 | 30 |    |
|    | 40 | 9.671 5301 | 396 | 9.725 5728 | 508   | 0.274 4272 | 9.945 9573 | 112 | 20 |    |
|    | 50 | 9.671 5697 | 396 | 9.725 6236 | 508   | 0.274 3764 | 9.945 9461 | 112 | 10 |    |
| 60 | 0  | 9.671 6093 | 396 | 9.725 6744 | 508   | 0.274 3256 | 9.945 9349 | 112 | 0  | 0  |

509

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2 101.8  
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6 603.6  
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2 219.0  
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8 952.8  
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119  
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2 23.8  
3 35.7  
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5 59.5  
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7 83.3  
8 95.2  
9 107.1

|    |    | sin        | d.  | Tang       | d. c. | Cotg       | Con        | d.  |    |    |
|----|----|------------|-----|------------|-------|------------|------------|-----|----|----|
| 0  | 0  | 0.671 6091 | 396 | 0.745 6744 | 508   | 0.334 3456 | 9 948 9449 | 112 | 0  | 60 |
|    | 10 | 0.671 6389 | 396 | 0.745 7452 | 508   | 0.334 3748 | 9 948 9447 | 112 | 50 |    |
|    | 20 | 0.671 6685 | 396 | 0.745 7759 | 508   | 0.334 4041 | 9 948 9445 | 112 | 40 |    |
|    | 30 | 0.671 7381 | 396 | 0.745 8467 | 508   | 0.334 4334 | 9 948 9443 | 112 | 30 |    |
|    | 40 | 0.671 7677 | 396 | 0.745 8775 | 508   | 0.334 4626 | 9 948 9441 | 112 | 20 |    |
|    | 50 | 0.671 8373 | 396 | 0.745 9483 | 508   | 0.334 4919 | 9 948 9439 | 112 | 10 |    |
| 1  | 0  | 0.671 8468 | 396 | 0.745 9791 | 507   | 0.334 5212 | 9 948 9437 | 112 | 0  | 59 |
|    | 10 | 0.671 8864 | 396 | 0.746 0498 | 508   | 0.334 5505 | 9 948 9435 | 112 | 50 |    |
|    | 20 | 0.671 9260 | 396 | 0.746 0806 | 508   | 0.334 5798 | 9 948 9433 | 112 | 40 |    |
|    | 30 | 0.671 9655 | 396 | 0.746 1114 | 507   | 0.334 6091 | 9 948 9431 | 112 | 30 |    |
|    | 40 | 0.672 0051 | 396 | 0.746 1421 | 508   | 0.334 6384 | 9 948 9429 | 112 | 20 |    |
|    | 50 | 0.672 0446 | 396 | 0.746 1729 | 508   | 0.334 6677 | 9 948 9427 | 112 | 10 |    |
| 2  | 0  | 0.672 0541 | 396 | 0.746 2037 | 507   | 0.334 6970 | 9 948 9425 | 112 | 0  | 58 |
|    | 10 | 0.672 1237 | 396 | 0.746 2344 | 508   | 0.334 7263 | 9 948 9423 | 112 | 50 |    |
|    | 20 | 0.672 1633 | 396 | 0.746 2652 | 507   | 0.334 7556 | 9 948 9421 | 112 | 40 |    |
|    | 30 | 0.672 2028 | 396 | 0.746 2959 | 507   | 0.334 7849 | 9 948 9419 | 112 | 30 |    |
|    | 40 | 0.672 2424 | 396 | 0.746 3266 | 507   | 0.334 8142 | 9 948 9417 | 112 | 20 |    |
|    | 50 | 0.672 2819 | 396 | 0.746 3574 | 507   | 0.334 8435 | 9 948 9415 | 112 | 10 |    |
| 3  | 0  | 0.672 3214 | 396 | 0.746 3881 | 507   | 0.334 8728 | 9 948 9413 | 112 | 0  | 57 |
|    | 10 | 0.672 3610 | 396 | 0.746 4189 | 507   | 0.334 9021 | 9 948 9411 | 112 | 50 |    |
|    | 20 | 0.672 4006 | 396 | 0.746 4496 | 507   | 0.334 9314 | 9 948 9409 | 112 | 40 |    |
|    | 30 | 0.672 4402 | 396 | 0.746 4804 | 507   | 0.334 9607 | 9 948 9407 | 112 | 30 |    |
|    | 40 | 0.672 4798 | 396 | 0.746 5111 | 508   | 0.334 9900 | 9 948 9405 | 112 | 20 |    |
|    | 50 | 0.672 5194 | 396 | 0.746 5419 | 507   | 0.335 0193 | 9 948 9403 | 112 | 10 |    |
| 4  | 0  | 0.672 5589 | 396 | 0.746 5726 | 507   | 0.335 0486 | 9 948 9401 | 112 | 0  | 56 |
|    | 10 | 0.672 5985 | 396 | 0.746 6034 | 507   | 0.335 0779 | 9 948 9400 | 112 | 50 |    |
|    | 20 | 0.672 6381 | 396 | 0.746 6341 | 507   | 0.335 1072 | 9 948 9398 | 112 | 40 |    |
|    | 30 | 0.672 6777 | 396 | 0.746 6649 | 507   | 0.335 1365 | 9 948 9396 | 112 | 30 |    |
|    | 40 | 0.672 7173 | 396 | 0.746 6956 | 507   | 0.335 1658 | 9 948 9394 | 112 | 20 |    |
|    | 50 | 0.672 7569 | 396 | 0.746 7264 | 507   | 0.335 1951 | 9 948 9392 | 112 | 10 |    |
| 5  | 0  | 0.672 7964 | 396 | 0.746 7571 | 507   | 0.335 2244 | 9 948 9390 | 112 | 0  | 55 |
|    | 10 | 0.672 8360 | 396 | 0.746 7879 | 507   | 0.335 2537 | 9 948 9388 | 112 | 50 |    |
|    | 20 | 0.672 8756 | 396 | 0.746 8186 | 507   | 0.335 2830 | 9 948 9386 | 112 | 40 |    |
|    | 30 | 0.672 9152 | 396 | 0.746 8494 | 507   | 0.335 3123 | 9 948 9384 | 112 | 30 |    |
|    | 40 | 0.672 9548 | 396 | 0.746 8801 | 507   | 0.335 3416 | 9 948 9382 | 112 | 20 |    |
|    | 50 | 0.672 9944 | 396 | 0.746 9109 | 507   | 0.335 3709 | 9 948 9380 | 112 | 10 |    |
| 6  | 0  | 0.673 0339 | 396 | 0.746 9416 | 507   | 0.335 4002 | 9 948 9378 | 112 | 0  | 54 |
|    | 10 | 0.673 0735 | 396 | 0.746 9724 | 507   | 0.335 4295 | 9 948 9376 | 112 | 50 |    |
|    | 20 | 0.673 1131 | 396 | 0.747 0031 | 507   | 0.335 4588 | 9 948 9374 | 112 | 40 |    |
|    | 30 | 0.673 1527 | 396 | 0.747 0339 | 507   | 0.335 4881 | 9 948 9372 | 112 | 30 |    |
|    | 40 | 0.673 1923 | 396 | 0.747 0646 | 507   | 0.335 5174 | 9 948 9370 | 112 | 20 |    |
|    | 50 | 0.673 2319 | 396 | 0.747 0954 | 507   | 0.335 5467 | 9 948 9368 | 112 | 10 |    |
| 7  | 0  | 0.673 2714 | 396 | 0.747 1261 | 507   | 0.335 5760 | 9 948 9366 | 112 | 0  | 53 |
|    | 10 | 0.673 3110 | 396 | 0.747 1569 | 507   | 0.335 6053 | 9 948 9364 | 112 | 50 |    |
|    | 20 | 0.673 3506 | 396 | 0.747 1876 | 507   | 0.335 6346 | 9 948 9362 | 112 | 40 |    |
|    | 30 | 0.673 3902 | 396 | 0.747 2184 | 507   | 0.335 6639 | 9 948 9360 | 112 | 30 |    |
|    | 40 | 0.673 4298 | 396 | 0.747 2491 | 507   | 0.335 6932 | 9 948 9358 | 112 | 20 |    |
|    | 50 | 0.673 4694 | 396 | 0.747 2800 | 507   | 0.335 7225 | 9 948 9356 | 112 | 10 |    |
| 8  | 0  | 0.673 5089 | 396 | 0.747 3107 | 507   | 0.335 7518 | 9 948 9354 | 112 | 0  | 52 |
|    | 10 | 0.673 5485 | 396 | 0.747 3415 | 507   | 0.335 7811 | 9 948 9352 | 112 | 50 |    |
|    | 20 | 0.673 5881 | 396 | 0.747 3722 | 507   | 0.335 8104 | 9 948 9350 | 112 | 40 |    |
|    | 30 | 0.673 6277 | 396 | 0.747 4030 | 507   | 0.335 8397 | 9 948 9348 | 112 | 30 |    |
|    | 40 | 0.673 6673 | 396 | 0.747 4337 | 507   | 0.335 8690 | 9 948 9346 | 112 | 20 |    |
|    | 50 | 0.673 7069 | 396 | 0.747 4645 | 507   | 0.335 8983 | 9 948 9344 | 112 | 10 |    |
| 9  | 0  | 0.673 7464 | 396 | 0.747 4952 | 507   | 0.335 9276 | 9 948 9342 | 112 | 0  | 51 |
|    | 10 | 0.673 7860 | 396 | 0.747 5260 | 507   | 0.335 9569 | 9 948 9340 | 112 | 50 |    |
|    | 20 | 0.673 8256 | 396 | 0.747 5567 | 507   | 0.335 9862 | 9 948 9338 | 112 | 40 |    |
|    | 30 | 0.673 8652 | 396 | 0.747 5875 | 507   | 0.336 0155 | 9 948 9336 | 112 | 30 |    |
|    | 40 | 0.673 9048 | 396 | 0.747 6182 | 507   | 0.336 0448 | 9 948 9334 | 112 | 20 |    |
|    | 50 | 0.673 9444 | 396 | 0.747 6490 | 507   | 0.336 0741 | 9 948 9332 | 112 | 10 |    |
| 10 | 0  | 0.673 9839 | 396 | 0.747 6797 | 507   | 0.336 1034 | 9 948 9330 | 112 | 0  | 50 |



| i  | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d.  | "  | i  |
|----|----|------------|-----|------------|-------|------------|------------|-----|----|----|
| 10 | 0  | 9.673 9769 | 393 | 9.728 7161 | 506   | 0.271 2839 | 9.945 2609 | 113 | 0  | 50 |
|    | 10 | 9.674 0162 | 394 | 9.728 7667 | 506   | 0.271 2333 | 9.945 2496 | 113 | 50 |    |
|    | 20 | 9.674 0556 | 394 | 9.728 8173 | 506   | 0.271 1827 | 9.945 2383 | 113 | 40 |    |
|    | 30 | 9.674 0949 | 393 | 9.728 8679 | 505   | 0.271 1321 | 9.945 2270 | 113 | 30 |    |
|    | 40 | 9.674 1342 | 393 | 9.728 9184 | 505   | 0.271 0816 | 9.945 2157 | 112 | 20 |    |
|    | 50 | 9.674 1735 | 393 | 9.728 9690 | 506   | 0.271 0310 | 9.945 2045 | 113 | 10 |    |
| 11 | 0  | 9.674 2128 | 393 | 9.729 0196 | 506   | 0.270 9804 | 9.945 1932 | 113 | 0  | 49 |
|    | 10 | 9.674 2521 | 393 | 9.729 0702 | 505   | 0.270 9298 | 9.945 1819 | 113 | 50 |    |
|    | 20 | 9.674 2914 | 392 | 9.729 1207 | 506   | 0.270 8793 | 9.945 1706 | 113 | 40 |    |
|    | 30 | 9.674 3306 | 392 | 9.729 1713 | 506   | 0.270 8287 | 9.945 1593 | 113 | 30 |    |
|    | 40 | 9.674 3699 | 393 | 9.729 2219 | 505   | 0.270 7781 | 9.945 1480 | 112 | 20 |    |
|    | 50 | 9.674 4092 | 393 | 9.729 2724 | 506   | 0.270 7276 | 9.945 1368 | 113 | 10 |    |
| 12 | 0  | 9.674 4485 | 392 | 9.729 3230 | 506   | 0.270 6770 | 9.945 1255 | 113 | 0  | 48 |
|    | 10 | 9.674 4877 | 393 | 9.729 3736 | 505   | 0.270 6264 | 9.945 1142 | 113 | 50 |    |
|    | 20 | 9.674 5270 | 393 | 9.729 4241 | 506   | 0.270 5759 | 9.945 1029 | 113 | 40 |    |
|    | 30 | 9.674 5663 | 392 | 9.729 4747 | 505   | 0.270 5253 | 9.945 0916 | 113 | 30 |    |
|    | 40 | 9.674 6055 | 392 | 9.729 5252 | 505   | 0.270 4748 | 9.945 0803 | 113 | 20 |    |
|    | 50 | 9.674 6448 | 393 | 9.729 5757 | 506   | 0.270 4243 | 9.945 0690 | 113 | 10 |    |
| 13 | 0  | 9.674 6840 | 392 | 9.729 6263 | 505   | 0.270 3737 | 9.945 0577 | 113 | 0  | 47 |
|    | 10 | 9.674 7232 | 393 | 9.729 6768 | 506   | 0.270 3232 | 9.945 0464 | 113 | 50 |    |
|    | 20 | 9.674 7625 | 392 | 9.729 7274 | 505   | 0.270 2726 | 9.945 0351 | 113 | 40 |    |
|    | 30 | 9.674 8017 | 392 | 9.729 7779 | 505   | 0.270 2221 | 9.945 0238 | 113 | 30 |    |
|    | 40 | 9.674 8409 | 392 | 9.729 8284 | 505   | 0.270 1716 | 9.945 0125 | 113 | 20 |    |
|    | 50 | 9.674 8801 | 393 | 9.729 8789 | 506   | 0.270 1211 | 9.945 0012 | 113 | 10 |    |
| 14 | 0  | 9.674 9194 | 392 | 9.729 9295 | 505   | 0.270 0705 | 9.944 9899 | 113 | 0  | 46 |
|    | 10 | 9.674 9586 | 392 | 9.729 9800 | 505   | 0.270 0200 | 9.944 9786 | 113 | 50 |    |
|    | 20 | 9.674 9978 | 392 | 9.730 0305 | 505   | 0.269 9695 | 9.944 9673 | 113 | 40 |    |
|    | 30 | 9.675 0370 | 392 | 9.730 0810 | 505   | 0.269 9190 | 9.944 9560 | 113 | 30 |    |
|    | 40 | 9.675 0762 | 392 | 9.730 1315 | 505   | 0.269 8685 | 9.944 9447 | 113 | 20 |    |
|    | 50 | 9.675 1154 | 392 | 9.730 1820 | 505   | 0.269 8180 | 9.944 9334 | 114 | 10 |    |
| 15 | 0  | 9.675 1546 | 391 | 9.730 2325 | 505   | 0.269 7675 | 9.944 9220 | 113 | 0  | 45 |
|    | 10 | 9.675 1937 | 392 | 9.730 2830 | 505   | 0.269 7170 | 9.944 9107 | 113 | 50 |    |
|    | 20 | 9.675 2329 | 392 | 9.730 3335 | 505   | 0.269 6665 | 9.944 8994 | 113 | 40 |    |
|    | 30 | 9.675 2721 | 392 | 9.730 3840 | 505   | 0.269 6160 | 9.944 8881 | 113 | 30 |    |
|    | 40 | 9.675 3113 | 391 | 9.730 4345 | 505   | 0.269 5655 | 9.944 8768 | 113 | 20 |    |
|    | 50 | 9.675 3504 | 392 | 9.730 4850 | 504   | 0.269 5150 | 9.944 8655 | 114 | 10 |    |
| 16 | 0  | 9.675 3896 | 391 | 9.730 5354 | 505   | 0.269 4646 | 9.944 8541 | 113 | 0  | 44 |
|    | 10 | 9.675 4287 | 392 | 9.730 5859 | 505   | 0.269 4141 | 9.944 8428 | 113 | 50 |    |
|    | 20 | 9.675 4679 | 391 | 9.730 6364 | 505   | 0.269 3636 | 9.944 8315 | 113 | 40 |    |
|    | 30 | 9.675 5070 | 391 | 9.730 6869 | 504   | 0.269 3131 | 9.944 8202 | 114 | 30 |    |
|    | 40 | 9.675 5462 | 391 | 9.730 7373 | 505   | 0.269 2627 | 9.944 8088 | 113 | 20 |    |
|    | 50 | 9.675 5853 | 392 | 9.730 7878 | 505   | 0.269 2122 | 9.944 7975 | 113 | 10 |    |
| 17 | 0  | 9.675 6245 | 391 | 9.730 8383 | 504   | 0.269 1617 | 9.944 7862 | 113 | 0  | 43 |
|    | 10 | 9.675 6636 | 391 | 9.730 8887 | 505   | 0.269 1113 | 9.944 7749 | 114 | 50 |    |
|    | 20 | 9.675 7027 | 391 | 9.730 9392 | 504   | 0.269 0608 | 9.944 7635 | 113 | 40 |    |
|    | 30 | 9.675 7418 | 391 | 9.730 9896 | 505   | 0.269 0104 | 9.944 7522 | 113 | 30 |    |
|    | 40 | 9.675 7809 | 391 | 9.731 0401 | 504   | 0.268 9599 | 9.944 7409 | 114 | 20 |    |
|    | 50 | 9.675 8200 | 392 | 9.731 0905 | 505   | 0.268 9095 | 9.944 7295 | 113 | 10 |    |
| 18 | 0  | 9.675 8592 | 391 | 9.731 1410 | 504   | 0.268 8590 | 9.944 7182 | 113 | 0  | 42 |
|    | 10 | 9.675 8983 | 391 | 9.731 1914 | 504   | 0.268 8086 | 9.944 7069 | 114 | 50 |    |
|    | 20 | 9.675 9374 | 390 | 9.731 2418 | 505   | 0.268 7582 | 9.944 6955 | 113 | 40 |    |
|    | 30 | 9.675 9764 | 391 | 9.731 2923 | 504   | 0.268 7077 | 9.944 6842 | 114 | 30 |    |
|    | 40 | 9.676 0155 | 391 | 9.731 3427 | 504   | 0.268 6573 | 9.944 6728 | 113 | 20 |    |
|    | 50 | 9.676 0546 | 391 | 9.731 3931 | 505   | 0.268 6069 | 9.944 6615 | 114 | 10 |    |
| 19 | 0  | 9.676 0937 | 391 | 9.731 4436 | 504   | 0.268 5564 | 9.944 6501 | 113 | 0  | 41 |
|    | 10 | 9.676 1328 | 390 | 9.731 4940 | 504   | 0.268 5060 | 9.944 6388 | 113 | 50 |    |
|    | 20 | 9.676 1718 | 391 | 9.731 5444 | 504   | 0.268 4556 | 9.944 6275 | 114 | 40 |    |
|    | 30 | 9.676 2109 | 391 | 9.731 5948 | 504   | 0.268 4052 | 9.944 6161 | 113 | 30 |    |
|    | 40 | 9.676 2500 | 391 | 9.731 6452 | 504   | 0.268 3548 | 9.944 6048 | 113 | 20 |    |
|    | 50 | 9.676 2890 | 390 | 9.731 6956 | 504   | 0.268 3044 | 9.944 5934 | 114 | 10 |    |
| 20 | 0  | 9.676 3281 | 391 | 9.731 7460 | 504   | 0.268 2540 | 9.944 5821 | 113 | 0  | 40 |
| i  | "  | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d.  | "  | i  |

505  
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2 101.0  
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8 404.0  
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2 100.8  
3 151.2  
4 201.6  
5 252.0  
6 302.4  
7 352.8  
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2 22.6  
3 33.9  
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5 56.5  
6 67.8  
7 79.1  
8 90.4  
9 101.7



|         |    | sin         | d.  | Tang       | d. c. | Cotg       | Cos        | d.  |    |    |
|---------|----|-------------|-----|------------|-------|------------|------------|-----|----|----|
| 504     | 20 | 0.9676 3281 | 390 | 9.731 7460 | 504   | 0.268 2540 | 9.944 5821 | 114 | 0  | 40 |
| 1 50.4  | 10 | 0.9676 3671 | 391 | 9.731 7964 | 504   | 0.268 2036 | 9.944 5707 | 114 | 50 |    |
| 2 100.8 | 20 | 0.9676 4062 | 391 | 9.731 8468 | 504   | 0.268 1532 | 9.944 5593 | 114 | 40 |    |
| 3 151.2 | 30 | 0.9676 4452 | 390 | 9.731 8972 | 504   | 0.268 1028 | 9.944 5480 | 114 | 30 |    |
| 4 201.6 | 40 | 0.9676 4842 | 391 | 9.731 9476 | 504   | 0.268 0524 | 9.944 5366 | 114 | 20 |    |
| 5 252.0 | 50 | 0.9676 5233 | 391 | 9.731 9980 | 504   | 0.268 0020 | 9.944 5253 | 114 | 10 |    |
| 6 302.4 | 21 | 0.9676 5623 | 390 | 9.732 0484 | 504   | 0.267 9516 | 9.944 5139 | 114 | 0  | 39 |
| 7 352.8 | 10 | 0.9676 6013 | 390 | 9.732 0988 | 503   | 0.267 9012 | 9.944 5025 | 114 | 50 |    |
| 8 403.2 | 20 | 0.9676 6403 | 390 | 9.732 1491 | 504   | 0.267 8509 | 9.944 4912 | 114 | 40 |    |
| 9 453.6 | 30 | 0.9676 6793 | 390 | 9.732 1995 | 504   | 0.267 8005 | 9.944 4798 | 114 | 30 |    |
|         | 40 | 0.9676 7183 | 390 | 9.732 2499 | 504   | 0.267 7501 | 9.944 4685 | 114 | 20 |    |
|         | 50 | 0.9676 7573 | 390 | 9.732 3003 | 503   | 0.267 6997 | 9.944 4571 | 114 | 10 |    |
| 508     | 22 | 0.9676 7963 | 390 | 9.732 3506 | 504   | 0.267 6494 | 9.944 4457 | 114 | 0  | 38 |
| 1 50.3  | 10 | 0.9676 8353 | 390 | 9.732 4010 | 503   | 0.267 5990 | 9.944 4344 | 114 | 50 |    |
| 2 100.6 | 20 | 0.9676 8743 | 390 | 9.732 4513 | 504   | 0.267 5487 | 9.944 4230 | 114 | 40 |    |
| 3 150.9 | 30 | 0.9676 9133 | 390 | 9.732 5017 | 503   | 0.267 4983 | 9.944 4116 | 114 | 30 |    |
| 4 201.2 | 40 | 0.9676 9523 | 390 | 9.732 5520 | 504   | 0.267 4480 | 9.944 4002 | 114 | 20 |    |
| 5 251.5 | 50 | 0.9676 9913 | 389 | 9.732 6024 | 503   | 0.267 3976 | 9.944 3889 | 114 | 10 |    |
| 6 301.8 | 23 | 0.9677 0302 | 390 | 9.732 6527 | 504   | 0.267 3473 | 9.944 3775 | 114 | 0  | 37 |
| 7 352.1 | 10 | 0.9677 0692 | 390 | 9.732 7031 | 503   | 0.267 2969 | 9.944 3661 | 114 | 50 |    |
| 8 402.4 | 20 | 0.9677 1082 | 389 | 9.732 7534 | 504   | 0.267 2466 | 9.944 3547 | 114 | 40 |    |
| 9 452.7 | 30 | 0.9677 1471 | 390 | 9.732 8038 | 503   | 0.267 1962 | 9.944 3433 | 114 | 30 |    |
|         | 40 | 0.9677 1861 | 389 | 9.732 8541 | 503   | 0.267 1459 | 9.944 3320 | 114 | 20 |    |
|         | 50 | 0.9677 2250 | 390 | 9.732 9044 | 503   | 0.267 0956 | 9.944 3206 | 114 | 10 |    |
| 502     | 24 | 0.9677 2640 | 389 | 9.732 9547 | 504   | 0.267 0453 | 9.944 3092 | 114 | 0  | 36 |
| 1 50.2  | 10 | 0.9677 3029 | 389 | 9.733 0051 | 503   | 0.266 9949 | 9.944 2978 | 114 | 50 |    |
| 2 100.4 | 20 | 0.9677 3418 | 390 | 9.733 0554 | 503   | 0.266 9446 | 9.944 2864 | 114 | 40 |    |
| 3 150.6 | 30 | 0.9677 3808 | 389 | 9.733 1057 | 503   | 0.266 8943 | 9.944 2750 | 114 | 30 |    |
| 4 200.8 | 40 | 0.9677 4197 | 389 | 9.733 1560 | 503   | 0.266 8440 | 9.944 2637 | 114 | 20 |    |
| 5 251.0 | 50 | 0.9677 4586 | 389 | 9.733 2063 | 503   | 0.266 7937 | 9.944 2523 | 114 | 10 |    |
| 6 301.2 | 25 | 0.9677 4975 | 389 | 9.733 2566 | 503   | 0.266 7434 | 9.944 2409 | 114 | 0  | 35 |
| 7 351.4 | 10 | 0.9677 5364 | 389 | 9.733 3069 | 503   | 0.266 6931 | 9.944 2295 | 114 | 50 |    |
| 8 401.6 | 20 | 0.9677 5753 | 389 | 9.733 3572 | 503   | 0.266 6428 | 9.944 2181 | 114 | 40 |    |
| 9 451.8 | 30 | 0.9677 6142 | 389 | 9.733 4075 | 503   | 0.266 5925 | 9.944 2067 | 114 | 30 |    |
|         | 40 | 0.9677 6531 | 389 | 9.733 4578 | 503   | 0.266 5422 | 9.944 1953 | 114 | 20 |    |
|         | 50 | 0.9677 6920 | 389 | 9.733 5081 | 503   | 0.266 4919 | 9.944 1839 | 114 | 10 |    |
| 390     | 26 | 0.9677 7309 | 389 | 9.733 5584 | 503   | 0.266 4416 | 9.944 1725 | 114 | 0  | 34 |
| 1 39.0  | 10 | 0.9677 7698 | 389 | 9.733 6087 | 503   | 0.266 3913 | 9.944 1611 | 114 | 50 |    |
| 2 78.0  | 20 | 0.9677 8087 | 389 | 9.733 6590 | 503   | 0.266 3410 | 9.944 1497 | 114 | 40 |    |
| 3 117.0 | 30 | 0.9677 8476 | 388 | 9.733 7093 | 502   | 0.266 2907 | 9.944 1383 | 114 | 30 |    |
| 4 156.0 | 40 | 0.9677 8864 | 389 | 9.733 7595 | 503   | 0.266 2405 | 9.944 1269 | 114 | 20 |    |
| 5 195.0 | 50 | 0.9677 9253 | 389 | 9.733 8098 | 503   | 0.266 1902 | 9.944 1155 | 114 | 10 |    |
| 6 234.0 | 27 | 0.9677 9642 | 388 | 9.733 8601 | 503   | 0.266 1399 | 9.944 1041 | 114 | 0  | 33 |
| 7 273.0 | 10 | 0.9678 0030 | 389 | 9.733 9104 | 502   | 0.266 0896 | 9.944 0927 | 114 | 50 |    |
| 8 312.0 | 20 | 0.9678 0419 | 388 | 9.733 9606 | 503   | 0.266 0394 | 9.944 0812 | 114 | 40 |    |
| 9 351.0 | 30 | 0.9678 0807 | 389 | 9.734 0109 | 502   | 0.265 9891 | 9.944 0698 | 114 | 30 |    |
|         | 40 | 0.9678 1196 | 388 | 9.734 0611 | 503   | 0.265 9389 | 9.944 0584 | 114 | 20 |    |
|         | 50 | 0.9678 1584 | 388 | 9.734 1114 | 502   | 0.265 8886 | 9.944 0470 | 114 | 10 |    |
| 389     | 28 | 0.9678 1972 | 389 | 9.734 1616 | 503   | 0.265 8384 | 9.944 0356 | 114 | 0  | 32 |
| 1 38.9  | 10 | 0.9678 2361 | 388 | 9.734 2119 | 502   | 0.265 7881 | 9.944 0242 | 114 | 50 |    |
| 2 77.8  | 20 | 0.9678 2749 | 388 | 9.734 2621 | 503   | 0.265 7379 | 9.944 0128 | 114 | 40 |    |
| 3 116.7 | 30 | 0.9678 3137 | 388 | 9.734 3124 | 502   | 0.265 6876 | 9.944 0013 | 114 | 30 |    |
| 4 155.6 | 40 | 0.9678 3525 | 388 | 9.734 3626 | 502   | 0.265 6374 | 9.943 9899 | 114 | 20 |    |
| 5 194.5 | 50 | 0.9678 3913 | 388 | 9.734 4128 | 503   | 0.265 5872 | 9.943 9785 | 114 | 10 |    |
| 6 233.4 | 29 | 0.9678 4301 | 389 | 9.734 4631 | 502   | 0.265 5369 | 9.943 9671 | 114 | 0  | 31 |
| 7 272.3 | 10 | 0.9678 4690 | 388 | 9.734 5133 | 502   | 0.265 4867 | 9.943 9556 | 114 | 50 |    |
| 8 311.2 | 20 | 0.9678 5078 | 387 | 9.734 5635 | 502   | 0.265 4365 | 9.943 9442 | 114 | 40 |    |
| 9 350.1 | 30 | 0.9678 5465 | 388 | 9.734 6137 | 503   | 0.265 3863 | 9.943 9328 | 114 | 30 |    |
|         | 40 | 0.9678 5853 | 388 | 9.734 6640 | 502   | 0.265 3360 | 9.943 9214 | 114 | 20 |    |
|         | 50 | 0.9678 6241 | 388 | 9.734 7142 | 502   | 0.265 2858 | 9.943 9099 | 114 | 10 |    |
| 114     | 30 | 0.9678 6629 | 388 | 9.734 7644 | 502   | 0.265 2356 | 9.943 8985 | 114 | 0  | 30 |
| 1 11.4  |    |             |     |            |       |            |            |     |    |    |
| 2 22.8  |    |             |     |            |       |            |            |     |    |    |
| 3 34.2  |    |             |     |            |       |            |            |     |    |    |
| 4 45.6  |    |             |     |            |       |            |            |     |    |    |
| 5 57.0  |    |             |     |            |       |            |            |     |    |    |
| 6 68.4  |    |             |     |            |       |            |            |     |    |    |
| 7 79.8  |    |             |     |            |       |            |            |     |    |    |
| 8 91.2  |    |             |     |            |       |            |            |     |    |    |
| 9 102.6 |    |             |     |            |       |            |            |     |    |    |



|    | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d.  | "  |    |
|----|----|------------|-----|------------|-------|------------|------------|-----|----|----|
| 30 | 0  | 9.678 6629 | 388 | 9.734 7644 | 502   | 0.265 2356 | 9.943 8985 | 114 | 0  | 30 |
|    | 10 | 9.678 7017 | 388 | 9.734 8146 | 502   | 0.265 1854 | 9.943 8871 | 115 | 50 |    |
|    | 20 | 9.678 7405 | 387 | 9.734 8648 | 501   | 0.265 1352 | 9.943 8756 | 114 | 40 |    |
|    | 30 | 9.678 7792 | 388 | 9.734 9150 | 502   | 0.265 0850 | 9.943 8642 | 114 | 30 |    |
|    | 40 | 9.678 8180 | 387 | 9.734 9652 | 501   | 0.265 0348 | 9.943 8528 | 115 | 20 |    |
|    | 50 | 9.678 8567 | 388 | 9.735 0154 | 502   | 0.264 9846 | 9.943 8413 | 114 | 10 |    |
| 31 | 0  | 9.678 8955 | 387 | 9.735 0656 | 502   | 0.264 9344 | 9.943 8299 | 115 | 0  | 29 |
|    | 10 | 9.678 9342 | 388 | 9.735 1158 | 502   | 0.264 8842 | 9.943 8184 | 114 | 50 |    |
|    | 20 | 9.678 9730 | 387 | 9.735 1660 | 501   | 0.264 8340 | 9.943 8070 | 114 | 40 |    |
|    | 30 | 9.679 0117 | 388 | 9.735 2162 | 501   | 0.264 7838 | 9.943 7956 | 115 | 30 |    |
|    | 40 | 9.679 0505 | 387 | 9.735 2663 | 502   | 0.264 7337 | 9.943 7841 | 114 | 20 |    |
|    | 50 | 9.679 0892 | 387 | 9.735 3165 | 502   | 0.264 6835 | 9.943 7727 | 115 | 10 |    |
| 32 | 0  | 9.679 1279 | 387 | 9.735 3667 | 502   | 0.264 6333 | 9.943 7612 | 114 | 0  | 28 |
|    | 10 | 9.679 1666 | 388 | 9.735 4169 | 501   | 0.264 5831 | 9.943 7498 | 115 | 50 |    |
|    | 20 | 9.679 2054 | 387 | 9.735 4670 | 502   | 0.264 5330 | 9.943 7383 | 114 | 40 |    |
|    | 30 | 9.679 2441 | 387 | 9.735 5172 | 502   | 0.264 4828 | 9.943 7269 | 115 | 30 |    |
|    | 40 | 9.679 2828 | 387 | 9.735 5674 | 501   | 0.264 4326 | 9.943 7154 | 114 | 20 |    |
|    | 50 | 9.679 3215 | 387 | 9.735 6175 | 502   | 0.264 3825 | 9.943 7040 | 115 | 10 |    |
| 33 | 0  | 9.679 3602 | 387 | 9.735 6677 | 501   | 0.264 3323 | 9.943 6925 | 114 | 0  | 27 |
|    | 10 | 9.679 3989 | 387 | 9.735 7178 | 502   | 0.264 2822 | 9.943 6811 | 115 | 50 |    |
|    | 20 | 9.679 4376 | 387 | 9.735 7680 | 501   | 0.264 2320 | 9.943 6696 | 115 | 40 |    |
|    | 30 | 9.679 4763 | 387 | 9.735 8181 | 502   | 0.264 1819 | 9.943 6581 | 114 | 30 |    |
|    | 40 | 9.679 5150 | 386 | 9.735 8683 | 501   | 0.264 1317 | 9.943 6467 | 115 | 20 |    |
|    | 50 | 9.679 5536 | 387 | 9.735 9184 | 501   | 0.264 0816 | 9.943 6352 | 114 | 10 |    |
| 34 | 0  | 9.679 5923 | 387 | 9.735 9685 | 502   | 0.264 0315 | 9.943 6238 | 115 | 0  | 26 |
|    | 10 | 9.679 6310 | 386 | 9.736 0187 | 501   | 0.263 9813 | 9.943 6123 | 115 | 50 |    |
|    | 20 | 9.679 6696 | 387 | 9.736 0688 | 501   | 0.263 9312 | 9.943 6008 | 114 | 40 |    |
|    | 30 | 9.679 7083 | 387 | 9.736 1189 | 502   | 0.263 8811 | 9.943 5894 | 115 | 30 |    |
|    | 40 | 9.679 7470 | 386 | 9.736 1691 | 501   | 0.263 8309 | 9.943 5779 | 115 | 20 |    |
|    | 50 | 9.679 7856 | 387 | 9.736 2192 | 501   | 0.263 7808 | 9.943 5664 | 115 | 10 |    |
| 35 | 0  | 9.679 8243 | 386 | 9.736 2693 | 501   | 0.263 7307 | 9.943 5549 | 114 | 0  | 25 |
|    | 10 | 9.679 8629 | 386 | 9.736 3194 | 501   | 0.263 6806 | 9.943 5435 | 115 | 50 |    |
|    | 20 | 9.679 9015 | 387 | 9.736 3695 | 501   | 0.263 6305 | 9.943 5320 | 115 | 40 |    |
|    | 30 | 9.679 9402 | 386 | 9.736 4196 | 501   | 0.263 5804 | 9.943 5205 | 114 | 30 |    |
|    | 40 | 9.679 9788 | 386 | 9.736 4697 | 501   | 0.263 5303 | 9.943 5091 | 115 | 20 |    |
|    | 50 | 9.680 0174 | 386 | 9.736 5198 | 501   | 0.263 4802 | 9.943 4976 | 115 | 10 |    |
| 36 | 0  | 9.680 0560 | 387 | 9.736 5699 | 501   | 0.263 4301 | 9.943 4861 | 115 | 0  | 24 |
|    | 10 | 9.680 0947 | 386 | 9.736 6200 | 501   | 0.263 3800 | 9.943 4746 | 115 | 50 |    |
|    | 20 | 9.680 1333 | 386 | 9.736 6701 | 501   | 0.263 3299 | 9.943 4631 | 115 | 40 |    |
|    | 30 | 9.680 1719 | 386 | 9.736 7202 | 501   | 0.263 2798 | 9.943 4516 | 114 | 30 |    |
|    | 40 | 9.680 2105 | 386 | 9.736 7703 | 501   | 0.263 2297 | 9.943 4402 | 115 | 20 |    |
|    | 50 | 9.680 2491 | 386 | 9.736 8204 | 501   | 0.263 1796 | 9.943 4287 | 115 | 10 |    |
| 37 | 0  | 9.680 2877 | 386 | 9.736 8705 | 501   | 0.263 1295 | 9.943 4172 | 115 | 0  | 23 |
|    | 10 | 9.680 3263 | 385 | 9.736 9206 | 500   | 0.263 0794 | 9.943 4057 | 115 | 50 |    |
|    | 20 | 9.680 3648 | 386 | 9.736 9706 | 501   | 0.263 0294 | 9.943 3942 | 115 | 40 |    |
|    | 30 | 9.680 4034 | 386 | 9.737 0207 | 501   | 0.262 9793 | 9.943 3827 | 115 | 30 |    |
|    | 40 | 9.680 4420 | 386 | 9.737 0708 | 500   | 0.262 9292 | 9.943 3712 | 115 | 20 |    |
|    | 50 | 9.680 4806 | 385 | 9.737 1208 | 501   | 0.262 8792 | 9.943 3597 | 115 | 10 |    |
| 38 | 0  | 9.680 5191 | 386 | 9.737 1709 | 501   | 0.262 8291 | 9.943 3482 | 115 | 0  | 22 |
|    | 10 | 9.680 5577 | 386 | 9.737 2210 | 500   | 0.262 7790 | 9.943 3367 | 115 | 50 |    |
|    | 20 | 9.680 5963 | 385 | 9.737 2710 | 501   | 0.262 7290 | 9.943 3252 | 114 | 40 |    |
|    | 30 | 9.680 6348 | 386 | 9.737 3211 | 500   | 0.262 6789 | 9.943 3138 | 115 | 30 |    |
|    | 40 | 9.680 6734 | 385 | 9.737 3711 | 501   | 0.262 6289 | 9.943 3023 | 116 | 20 |    |
|    | 50 | 9.680 7119 | 385 | 9.737 4212 | 500   | 0.262 5788 | 9.943 2907 | 115 | 10 |    |
| 39 | 0  | 9.680 7504 | 386 | 9.737 4712 | 500   | 0.262 5288 | 9.943 2792 | 115 | 0  | 21 |
|    | 10 | 9.680 7890 | 385 | 9.737 5212 | 501   | 0.262 4788 | 9.943 2677 | 115 | 50 |    |
|    | 20 | 9.680 8275 | 385 | 9.737 5713 | 500   | 0.262 4287 | 9.943 2562 | 115 | 40 |    |
|    | 30 | 9.680 8660 | 386 | 9.737 6213 | 500   | 0.262 3787 | 9.943 2447 | 115 | 30 |    |
|    | 40 | 9.680 9046 | 385 | 9.737 6713 | 501   | 0.262 3286 | 9.943 2332 | 115 | 20 |    |
|    | 50 | 9.680 9431 | 385 | 9.737 7214 | 500   | 0.262 2786 | 9.943 2217 | 115 | 10 |    |
| 40 | 0  | 9.680 9816 | 385 | 9.737 7714 | 500   | 0.262 2286 | 9.943 2102 | 115 | 0  | 20 |
|    |    |            |     |            |       |            |            |     |    |    |
|    |    | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d.  | "  |    |

501

1 50.1  
2 100.1  
3 150.1  
4 200.1  
5 250.1  
6 300.1  
7 350.1  
8 400.1  
9 450.1

500

1 50.0  
2 100.0  
3 150.0  
4 200.0  
5 250.0  
6 300.0  
7 350.0  
8 400.0  
9 450.0

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1 38.8  
2 77.6  
3 116.4  
4 155.2  
5 194.0  
6 232.8  
7 271.6  
8 310.4  
9 349.2

387

1 38.7  
2 77.4  
3 116.1  
4 154.8  
5 193.5  
6 232.2  
7 270.9  
8 309.6  
9 348.3

386

1 38.6  
2 77.2  
3 115.8  
4 154.4  
5 193.0  
6 231.6  
7 270.2  
8 308.8  
9 347.4

115

1 11.5  
2 23.0  
3 34.5  
4 46.0  
5 57.5  
6 69.0  
7 80.5  
8 92.0  
9 103.5



|      | <i>r</i> | <i>n</i> | Sin       | d.  | Tang      | d. r | Cotg      | Sec       | d.  | <i>n</i> | <i>r</i> |
|------|----------|----------|-----------|-----|-----------|------|-----------|-----------|-----|----------|----------|
| 100  | 40       | 0        | 0.6427876 | 155 | 0.7147243 | 5    | 0.3999136 | 0.9134408 | 115 | 0        | 20       |
| 150  |          | 10       | 0.6431759 | 155 | 0.7150543 | 5    | 0.3996836 | 0.9134407 | 115 | 50       |          |
| 200  |          | 20       | 0.6435642 | 155 | 0.7153843 | 5    | 0.3994526 | 0.9134406 | 115 | 40       |          |
| 250  |          | 30       | 0.6439525 | 155 | 0.7157143 | 5    | 0.3992216 | 0.9134405 | 115 | 30       |          |
| 300  |          | 40       | 0.6443408 | 155 | 0.7160443 | 5    | 0.3989906 | 0.9134404 | 115 | 20       |          |
| 350  |          | 50       | 0.6447291 | 155 | 0.7163743 | 5    | 0.3987596 | 0.9134403 | 115 | 10       |          |
| 400  |          | 0        | 0.6451174 | 155 | 0.7167043 | 5    | 0.3985286 | 0.9134402 | 115 | 0        | 19       |
| 450  |          | 10       | 0.6455057 | 154 | 0.7170343 | 5    | 0.3982976 | 0.9134401 | 115 | 50       |          |
| 500  |          | 20       | 0.6458940 | 154 | 0.7173643 | 5    | 0.3980666 | 0.9134400 | 115 | 40       |          |
| 550  |          | 30       | 0.6462823 | 154 | 0.7176943 | 5    | 0.3978356 | 0.9134399 | 115 | 30       |          |
| 600  |          | 40       | 0.6466706 | 154 | 0.7180243 | 5    | 0.3976046 | 0.9134398 | 115 | 20       |          |
| 650  |          | 50       | 0.6470589 | 154 | 0.7183543 | 5    | 0.3973736 | 0.9134397 | 115 | 10       |          |
| 700  |          | 0        | 0.6474472 | 154 | 0.7186843 | 5    | 0.3971426 | 0.9134396 | 115 | 0        | 18       |
| 750  |          | 10       | 0.6478355 | 154 | 0.7190143 | 5    | 0.3969116 | 0.9134395 | 115 | 50       |          |
| 800  |          | 20       | 0.6482238 | 154 | 0.7193443 | 5    | 0.3966806 | 0.9134394 | 115 | 40       |          |
| 850  |          | 30       | 0.6486121 | 154 | 0.7196743 | 5    | 0.3964496 | 0.9134393 | 115 | 30       |          |
| 900  |          | 40       | 0.6490004 | 154 | 0.7200043 | 5    | 0.3962186 | 0.9134392 | 115 | 20       |          |
| 950  |          | 50       | 0.6493887 | 154 | 0.7203343 | 5    | 0.3959876 | 0.9134391 | 115 | 10       |          |
| 1000 |          | 0        | 0.6497770 | 154 | 0.7206643 | 5    | 0.3957566 | 0.9134390 | 115 | 0        | 17       |
| 1050 |          | 10       | 0.6501653 | 153 | 0.7209943 | 5    | 0.3955256 | 0.9134389 | 115 | 50       |          |
| 1100 |          | 20       | 0.6505536 | 153 | 0.7213243 | 5    | 0.3952946 | 0.9134388 | 115 | 40       |          |
| 1150 |          | 30       | 0.6509419 | 153 | 0.7216543 | 5    | 0.3950636 | 0.9134387 | 115 | 30       |          |
| 1200 |          | 40       | 0.6513302 | 153 | 0.7219843 | 5    | 0.3948326 | 0.9134386 | 115 | 20       |          |
| 1250 |          | 50       | 0.6517185 | 153 | 0.7223143 | 5    | 0.3946016 | 0.9134385 | 115 | 10       |          |
| 1300 |          | 0        | 0.6521068 | 153 | 0.7226443 | 5    | 0.3943706 | 0.9134384 | 115 | 0        | 16       |
| 1350 |          | 10       | 0.6524951 | 153 | 0.7229743 | 5    | 0.3941396 | 0.9134383 | 115 | 50       |          |
| 1400 |          | 20       | 0.6528834 | 153 | 0.7233043 | 5    | 0.3939086 | 0.9134382 | 115 | 40       |          |
| 1450 |          | 30       | 0.6532717 | 153 | 0.7236343 | 5    | 0.3936776 | 0.9134381 | 115 | 30       |          |
| 1500 |          | 40       | 0.6536600 | 153 | 0.7239643 | 5    | 0.3934466 | 0.9134380 | 115 | 20       |          |
| 1550 |          | 50       | 0.6540483 | 153 | 0.7242943 | 5    | 0.3932156 | 0.9134379 | 115 | 10       |          |
| 1600 |          | 0        | 0.6544366 | 153 | 0.7246243 | 5    | 0.3929846 | 0.9134378 | 115 | 0        | 15       |
| 1650 |          | 10       | 0.6548249 | 152 | 0.7249543 | 5    | 0.3927536 | 0.9134377 | 115 | 50       |          |
| 1700 |          | 20       | 0.6552132 | 152 | 0.7252843 | 5    | 0.3925226 | 0.9134376 | 115 | 40       |          |
| 1750 |          | 30       | 0.6556015 | 152 | 0.7256143 | 5    | 0.3922916 | 0.9134375 | 115 | 30       |          |
| 1800 |          | 40       | 0.6559898 | 152 | 0.7259443 | 5    | 0.3920606 | 0.9134374 | 115 | 20       |          |
| 1850 |          | 50       | 0.6563781 | 152 | 0.7262743 | 5    | 0.3918296 | 0.9134373 | 115 | 10       |          |
| 1900 |          | 0        | 0.6567664 | 152 | 0.7266043 | 5    | 0.3915986 | 0.9134372 | 115 | 0        | 14       |
| 1950 |          | 10       | 0.6571547 | 152 | 0.7269343 | 5    | 0.3913676 | 0.9134371 | 115 | 50       |          |
| 2000 |          | 20       | 0.6575430 | 152 | 0.7272643 | 5    | 0.3911366 | 0.9134370 | 115 | 40       |          |
| 2050 |          | 30       | 0.6579313 | 152 | 0.7275943 | 5    | 0.3909056 | 0.9134369 | 115 | 30       |          |
| 2100 |          | 40       | 0.6583196 | 152 | 0.7279243 | 5    | 0.3906746 | 0.9134368 | 115 | 20       |          |
| 2150 |          | 50       | 0.6587079 | 152 | 0.7282543 | 5    | 0.3904436 | 0.9134367 | 115 | 10       |          |
| 2200 |          | 0        | 0.6590962 | 152 | 0.7285843 | 5    | 0.3902126 | 0.9134366 | 115 | 0        | 13       |
| 2250 |          | 10       | 0.6594845 | 151 | 0.7289143 | 5    | 0.3899816 | 0.9134365 | 115 | 50       |          |
| 2300 |          | 20       | 0.6598728 | 151 | 0.7292443 | 5    | 0.3897506 | 0.9134364 | 115 | 40       |          |
| 2350 |          | 30       | 0.6602611 | 151 | 0.7295743 | 5    | 0.3895196 | 0.9134363 | 115 | 30       |          |
| 2400 |          | 40       | 0.6606494 | 151 | 0.7299043 | 5    | 0.3892886 | 0.9134362 | 115 | 20       |          |
| 2450 |          | 50       | 0.6610377 | 151 | 0.7302343 | 5    | 0.3890576 | 0.9134361 | 115 | 10       |          |
| 2500 |          | 0        | 0.6614260 | 151 | 0.7305643 | 5    | 0.3888266 | 0.9134360 | 115 | 0        | 12       |
| 2550 |          | 10       | 0.6618143 | 151 | 0.7308943 | 5    | 0.3885956 | 0.9134359 | 115 | 50       |          |
| 2600 |          | 20       | 0.6622026 | 151 | 0.7312243 | 5    | 0.3883646 | 0.9134358 | 115 | 40       |          |
| 2650 |          | 30       | 0.6625909 | 151 | 0.7315543 | 5    | 0.3881336 | 0.9134357 | 115 | 30       |          |
| 2700 |          | 40       | 0.6629792 | 151 | 0.7318843 | 5    | 0.3879026 | 0.9134356 | 115 | 20       |          |
| 2750 |          | 50       | 0.6633675 | 151 | 0.7322143 | 5    | 0.3876716 | 0.9134355 | 115 | 10       |          |
| 2800 |          | 0        | 0.6637558 | 151 | 0.7325443 | 5    | 0.3874406 | 0.9134354 | 115 | 0        | 11       |
| 2850 |          | 10       | 0.6641441 | 150 | 0.7328743 | 5    | 0.3872096 | 0.9134353 | 115 | 50       |          |
| 2900 |          | 20       | 0.6645324 | 150 | 0.7332043 | 5    | 0.3869786 | 0.9134352 | 115 | 40       |          |
| 2950 |          | 30       | 0.6649207 | 150 | 0.7335343 | 5    | 0.3867476 | 0.9134351 | 115 | 30       |          |
| 3000 |          | 40       | 0.6653090 | 150 | 0.7338643 | 5    | 0.3865166 | 0.9134350 | 115 | 20       |          |
| 3050 |          | 50       | 0.6656973 | 150 | 0.7341943 | 5    | 0.3862856 | 0.9134349 | 115 | 10       |          |
| 3100 |          | 0        | 0.6660856 | 150 | 0.7345243 | 5    | 0.3860546 | 0.9134348 | 115 | 0        | 10       |
| 3150 |          | 10       | 0.6664739 | 150 | 0.7348543 | 5    | 0.3858236 | 0.9134347 | 115 | 50       |          |
| 3200 |          | 20       | 0.6668622 | 150 | 0.7351843 | 5    | 0.3855926 | 0.9134346 | 115 | 40       |          |
| 3250 |          | 30       | 0.6672505 | 150 | 0.7355143 | 5    | 0.3853616 | 0.9134345 | 115 | 30       |          |
| 3300 |          | 40       | 0.6676388 | 150 | 0.7358443 | 5    | 0.3851306 | 0.9134344 | 115 | 20       |          |
| 3350 |          | 50       | 0.6680271 | 150 | 0.7361743 | 5    | 0.3848996 | 0.9134343 | 115 | 10       |          |
| 3400 |          | 0        | 0.6684154 | 150 | 0.7365043 | 5    | 0.3846686 | 0.9134342 | 115 | 0        | 9        |
| 3450 |          | 10       | 0.6688037 | 149 | 0.7368343 | 5    | 0.3844376 | 0.9134341 | 115 | 50       |          |
| 3500 |          | 20       | 0.6691920 | 149 | 0.7371643 | 5    | 0.3842066 | 0.9134340 | 115 | 40       |          |
| 3550 |          | 30       | 0.6695803 | 149 | 0.7374943 | 5    | 0.3839756 | 0.9134339 | 115 | 30       |          |
| 3600 |          | 40       | 0.6699686 | 149 | 0.7378243 | 5    | 0.3837446 | 0.9134338 | 115 | 20       |          |
| 3650 |          | 50       | 0.6703569 | 149 | 0.7381543 | 5    | 0.3835136 | 0.9134337 | 115 | 10       |          |
| 3700 |          | 0        | 0.6707452 | 149 | 0.7384843 | 5    | 0.3832826 | 0.9134336 | 115 | 0        | 8        |
| 3750 |          | 10       | 0.6711335 | 149 | 0.7388143 | 5    | 0.3830516 | 0.9134335 | 115 | 50       |          |
| 3800 |          | 20       | 0.6715218 | 149 | 0.7391443 | 5    | 0.3828206 | 0.9134334 | 115 | 40       |          |
| 3850 |          | 30       | 0.6719101 | 149 | 0.7394743 | 5    | 0.3825896 | 0.9134333 | 115 | 30       |          |
| 3900 |          | 40       | 0.6722984 | 149 | 0.7398043 | 5    | 0.3823586 | 0.9134332 | 115 | 20       |          |
| 3950 |          | 50       | 0.6726867 | 149 | 0.7401343 | 5    | 0.3821276 | 0.9134331 | 115 | 10       |          |
| 4000 |          | 0        | 0.6730750 | 149 | 0.7404643 | 5    | 0.3818966 | 0.9134330 | 115 | 0        | 7        |
| 4050 |          | 10       | 0.6734633 | 148 | 0.7407943 | 5    | 0.3816656 | 0.9134329 | 115 | 50       |          |
| 4100 |          | 20       | 0.6738516 | 148 | 0.7411243 | 5    | 0.3814346 | 0.9134328 | 115 | 40       |          |
| 4150 |          | 30       | 0.6742399 | 148 | 0.7414543 | 5    | 0.3812036 | 0.9134327 | 115 | 30       |          |
| 4200 |          | 40       | 0.6746282 | 148 | 0.7417843 | 5    | 0.3809726 | 0.9134326 | 115 | 20       |          |
| 4250 |          | 50       | 0.6750165 | 148 | 0.7421143 | 5    | 0.3807416 | 0.9134325 | 115 | 10       |          |
| 4300 |          | 0        | 0.6754048 | 148 | 0.7424443 | 5    | 0.3805106 | 0.9134324 | 115 | 0        | 6        |
| 4350 |          | 10       | 0.6757931 | 148 | 0.7427743 | 5    | 0.3802796 | 0.9134323 | 115 | 50       |          |
| 4400 |          | 20       | 0.6761814 | 148 | 0.7431043 | 5    | 0.3800486 | 0.9134322 | 115 | 40       |          |
| 4450 |          | 30       | 0.6765697 | 148 | 0.7434343 | 5    | 0.3798176 | 0.9134321 | 115 | 30       |          |
| 4500 |          | 40       | 0.6769580 | 148 | 0.7437643 | 5    | 0.3795866 | 0.9134320 | 115 | 20       |          |
| 4550 |          | 50       | 0.6773463 | 148 | 0.7440943 | 5    | 0.3793556 | 0.9134319 | 115 | 10       |          |
| 4600 |          | 0        | 0.6777346 | 148 | 0.7444243 | 5    | 0.3791246 | 0.9134318 | 115 | 0        | 5        |
| 4650 |          | 10       | 0.6781229 | 147 | 0.7447543 | 5    | 0.3788936 | 0.9134317 | 115 | 50       |          |
| 4700 |          | 20       | 0.6785112 | 147 | 0.7450843 | 5    | 0.3786626 | 0.9134316 | 115 | 40       |          |
| 4750 |          | 30       | 0.6789000 | 147 | 0.7454143 | 5    | 0.3784316 | 0.9134315 | 115 | 30       |          |
| 4800 |          | 40       | 0.6792883 | 147 | 0.7457443 | 5    | 0.3782006 | 0.9134314 | 115 | 20       |          |
| 4850 |          | 50       | 0.6796766 | 147 | 0.7460743 | 5    | 0.3779696 | 0.9134313 | 115 | 10       |          |
| 4900 |          | 0        | 0.6800649 | 147 | 0.7464043 | 5    | 0.3777386 | 0.9134312 | 115 | 0        | 4        |
| 4950 |          | 10       | 0.6804532 | 147 | 0.7467343 | 5    | 0.3775076 | 0.9134311 | 115 | 50       |          |
| 5000 |          | 20       | 0.6808415 | 147 | 0.7470643 | 5    | 0.3772766 | 0.9134310 | 115 | 40       |          |
| 5050 |          | 30       | 0.6812298 | 147 | 0.7473943 | 5    | 0.3770456 | 0.9134309 | 115 | 30       |          |
| 5100 |          | 40       | 0.6816181 | 147 | 0.7477243 | 5    | 0.3768146 | 0.9134308 | 115 | 20       |          |
| 5150 |          | 50       | 0.6820064 | 147 | 0.7480543 | 5    | 0.3765836 | 0.9134307 | 115 | 10       |          |
| 5200 |          | 0        | 0.6823947 | 147 | 0.7483843 | 5    | 0.3763526 | 0.9134306 | 115 | 0        | 3        |
| 5250 |          | 10       | 0.6827830 | 146 | 0.7487143 | 5    | 0.3761216 | 0.9134305 | 115 | 50       |          |
| 5300 |          | 20       | 0.6831713 | 146 | 0.7490443 | 5    | 0.3758906 | 0.9134304 | 115 | 40       |          |
| 5350 |          | 30       | 0.6835596 | 146 | 0.7493743 | 5    | 0.3756596 | 0.9134303 | 115 | 30       |          |
| 5400 | </       |          |           |     |           |      |           |           |     |          |          |







|         | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d.  | "  |    |
|---------|----|------------|-----|------------|-------|------------|------------|-----|----|----|
| 496     | 0  | 9.685 5712 | 380 | 9.743 7520 | 496   | 0.256 2480 | 9.941 8193 | 117 | 0  | 60 |
| 1 49.6  | 10 | 9.685 6092 | 380 | 9.743 8016 | 497   | 0.256 1984 | 9.941 8076 | 117 | 50 |    |
| 2 99.2  | 20 | 9.685 6472 | 380 | 9.743 8513 | 496   | 0.256 1487 | 9.941 7959 | 117 | 40 |    |
| 3 148.8 | 30 | 9.685 6852 | 380 | 9.743 9009 | 496   | 0.256 0991 | 9.941 7842 | 117 | 30 |    |
| 4 198.4 | 40 | 9.685 7231 | 379 | 9.743 9506 | 497   | 0.256 0494 | 9.941 7726 | 116 | 20 |    |
| 5 248.0 | 50 | 9.685 7611 | 380 | 9.744 0002 | 496   | 0.255 9998 | 9.941 7609 | 117 | 10 |    |
| 6 297.6 | 1  | 9.685 7991 | 379 | 9.744 0499 | 497   | 0.255 9501 | 9.941 7492 | 117 | 0  | 59 |
| 7 347.2 | 10 | 9.685 8370 | 380 | 9.744 0995 | 496   | 0.255 9005 | 9.941 7375 | 117 | 50 |    |
| 8 396.8 | 20 | 9.685 8750 | 379 | 9.744 1491 | 496   | 0.255 8509 | 9.941 7258 | 117 | 40 |    |
| 9 446.4 | 30 | 9.685 9129 | 379 | 9.744 1987 | 496   | 0.255 8013 | 9.941 7142 | 116 | 30 |    |
|         | 40 | 9.685 9509 | 380 | 9.744 2484 | 497   | 0.255 7516 | 9.941 7025 | 117 | 20 |    |
|         | 50 | 9.685 9888 | 379 | 9.744 2980 | 496   | 0.255 7020 | 9.941 6908 | 117 | 10 |    |
| 495     | 2  | 9.686 0267 | 379 | 9.744 3476 | 496   | 0.255 6524 | 9.941 6791 | 117 | 0  | 58 |
| 1 49.5  | 10 | 9.686 0647 | 380 | 9.744 3972 | 496   | 0.255 6028 | 9.941 6674 | 117 | 50 |    |
| 2 99.0  | 20 | 9.686 1026 | 379 | 9.744 4469 | 497   | 0.255 5531 | 9.941 6557 | 117 | 40 |    |
| 3 148.5 | 30 | 9.686 1405 | 379 | 9.744 4965 | 496   | 0.255 5035 | 9.941 6440 | 117 | 30 |    |
| 4 198.0 | 40 | 9.686 1784 | 379 | 9.744 5461 | 496   | 0.255 4539 | 9.941 6324 | 116 | 20 |    |
| 5 247.5 | 50 | 9.686 2163 | 379 | 9.744 5957 | 496   | 0.255 4043 | 9.941 6207 | 117 | 10 |    |
| 6 297.0 | 3  | 9.686 2542 | 379 | 9.744 6453 | 496   | 0.255 3547 | 9.941 6090 | 117 | 0  | 57 |
| 7 346.5 | 10 | 9.686 2922 | 380 | 9.744 6949 | 496   | 0.255 3051 | 9.941 5973 | 117 | 50 |    |
| 8 396.0 | 20 | 9.686 3301 | 379 | 9.744 7445 | 496   | 0.255 2555 | 9.941 5856 | 117 | 40 |    |
| 9 445.5 | 30 | 9.686 3679 | 378 | 9.744 7941 | 496   | 0.255 2059 | 9.941 5739 | 117 | 30 |    |
|         | 40 | 9.686 4058 | 379 | 9.744 8437 | 496   | 0.255 1563 | 9.941 5622 | 117 | 20 |    |
| 380     | 50 | 9.686 4437 | 379 | 9.744 8933 | 495   | 0.255 1067 | 9.941 5505 | 117 | 10 |    |
| 1 38.0  | 4  | 9.686 4816 | 379 | 9.744 9428 | 496   | 0.255 0572 | 9.941 5388 | 117 | 0  | 56 |
| 2 76.0  | 10 | 9.686 5195 | 380 | 9.744 9924 | 496   | 0.255 0076 | 9.941 5271 | 117 | 50 |    |
| 3 114.0 | 20 | 9.686 5574 | 379 | 9.745 0420 | 496   | 0.254 9580 | 9.941 5154 | 117 | 40 |    |
| 4 152.0 | 30 | 9.686 5952 | 378 | 9.745 0916 | 496   | 0.254 9084 | 9.941 5037 | 118 | 30 |    |
| 5 190.0 | 40 | 9.686 6331 | 379 | 9.745 1412 | 495   | 0.254 8588 | 9.941 4919 | 117 | 20 |    |
| 6 228.0 | 50 | 9.686 6710 | 378 | 9.745 1907 | 490   | 0.254 8093 | 9.941 4802 | 117 | 10 |    |
| 7 266.0 | 5  | 9.686 7088 | 379 | 9.745 2403 | 496   | 0.254 7597 | 9.941 4685 | 117 | 0  | 55 |
| 8 304.0 | 10 | 9.686 7467 | 378 | 9.745 2899 | 495   | 0.254 7101 | 9.941 4568 | 117 | 50 |    |
| 9 342.0 | 20 | 9.686 7845 | 379 | 9.745 3394 | 496   | 0.254 6606 | 9.941 4451 | 117 | 40 |    |
|         | 30 | 9.686 8224 | 378 | 9.745 3890 | 495   | 0.254 6110 | 9.941 4334 | 117 | 30 |    |
| 379     | 40 | 9.686 8602 | 378 | 9.745 4385 | 495   | 0.254 5615 | 9.941 4217 | 117 | 20 |    |
| 1 37.9  | 50 | 9.686 8980 | 379 | 9.745 4881 | 496   | 0.254 5119 | 9.941 4100 | 118 | 10 |    |
| 2 75.8  | 6  | 9.686 9359 | 378 | 9.745 5376 | 495   | 0.254 4624 | 9.941 3982 | 117 | 0  | 54 |
| 3 113.7 | 10 | 9.686 9737 | 378 | 9.745 5872 | 495   | 0.254 4128 | 9.941 3865 | 117 | 50 |    |
| 4 151.6 | 20 | 9.687 0115 | 378 | 9.745 6367 | 495   | 0.254 3633 | 9.941 3748 | 117 | 40 |    |
| 5 189.5 | 30 | 9.687 0493 | 378 | 9.745 6863 | 495   | 0.254 3137 | 9.941 3631 | 118 | 30 |    |
| 6 227.4 | 40 | 9.687 0871 | 378 | 9.745 7358 | 495   | 0.254 2642 | 9.941 3513 | 117 | 20 |    |
| 7 265.3 | 50 | 9.687 1250 | 378 | 9.745 7853 | 495   | 0.254 2147 | 9.941 3396 | 117 | 10 |    |
| 8 303.2 | 7  | 9.687 1628 | 378 | 9.745 8349 | 496   | 0.254 1651 | 9.941 3279 | 117 | 0  | 53 |
| 9 341.1 | 10 | 9.687 2006 | 378 | 9.745 8844 | 495   | 0.254 1156 | 9.941 3162 | 118 | 50 |    |
|         | 20 | 9.687 2384 | 378 | 9.745 9339 | 495   | 0.254 0661 | 9.941 3044 | 117 | 40 |    |
| 378     | 30 | 9.687 2761 | 377 | 9.745 9834 | 495   | 0.254 0166 | 9.941 2927 | 117 | 30 |    |
| 1 37.8  | 40 | 9.687 3139 | 378 | 9.746 0330 | 496   | 0.253 9670 | 9.941 2810 | 118 | 20 |    |
| 2 75.6  | 50 | 9.687 3517 | 378 | 9.746 0825 | 495   | 0.253 9175 | 9.941 2692 | 117 | 10 |    |
| 3 113.4 | 8  | 9.687 3895 | 378 | 9.746 1320 | 495   | 0.253 8680 | 9.941 2575 | 117 | 0  | 52 |
| 4 151.2 | 10 | 9.687 4273 | 377 | 9.746 1815 | 495   | 0.253 8185 | 9.941 2458 | 118 | 50 |    |
| 5 189.0 | 20 | 9.687 4650 | 378 | 9.746 2310 | 495   | 0.253 7690 | 9.941 2340 | 117 | 40 |    |
| 6 226.8 | 30 | 9.687 5028 | 378 | 9.746 2805 | 495   | 0.253 7195 | 9.941 2223 | 117 | 30 |    |
| 7 264.6 | 40 | 9.687 5406 | 377 | 9.746 3300 | 495   | 0.253 6700 | 9.941 2106 | 118 | 20 |    |
| 8 302.4 | 50 | 9.687 5783 | 378 | 9.746 3795 | 495   | 0.253 6205 | 9.941 1988 | 117 | 10 |    |
| 9 340.2 | 9  | 9.687 6161 | 377 | 9.746 4290 | 495   | 0.253 5710 | 9.941 1871 | 117 | 0  | 51 |
|         | 10 | 9.687 6538 | 378 | 9.746 4785 | 495   | 0.253 5215 | 9.941 1753 | 117 | 50 |    |
|         | 20 | 9.687 6916 | 378 | 9.746 5280 | 495   | 0.253 4720 | 9.941 1636 | 118 | 40 |    |
|         | 30 | 9.687 7293 | 377 | 9.746 5775 | 495   | 0.253 4225 | 9.941 1518 | 117 | 30 |    |
|         | 40 | 9.687 7671 | 378 | 9.746 6270 | 494   | 0.253 3730 | 9.941 1401 | 118 | 20 |    |
|         | 50 | 9.687 8048 | 377 | 9.746 6764 | 494   | 0.253 3236 | 9.941 1283 | 117 | 10 |    |
|         | 0  | 9.687 8425 | 377 | 9.746 7259 | 495   | 0.253 2741 | 9.941 1166 | 117 | 0  | 50 |
|         | "  | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d.  | "  |    |



|    | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d.  | "  |    |
|----|----|------------|-----|------------|-------|------------|------------|-----|----|----|
| 10 | o  | 9.687 8425 | 377 | 9.746 7259 | 495   | 0.253 2741 | 9.941 1166 | 118 | o  | 50 |
|    | 10 | 9.687 8802 | 378 | 9.746 7754 | 495   | 0.253 2246 | 9.941 1048 | 117 | 50 |    |
|    | 20 | 9.687 9180 | 378 | 9.746 8249 | 495   | 0.253 1751 | 9.941 0931 | 117 | 40 |    |
|    | 30 | 9.687 9557 | 377 | 9.746 8743 | 494   | 0.253 1257 | 9.941 0813 | 118 | 30 |    |
|    | 40 | 9.687 9934 | 377 | 9.746 9238 | 495   | 0.253 0762 | 9.941 0696 | 117 | 20 |    |
|    | 50 | 9.688 0311 | 377 | 9.746 9733 | 495   | 0.253 0267 | 9.941 0578 | 118 | 10 |    |
| 11 | o  | 9.688 0688 | 377 | 9.747 0227 | 495   | 0.252 9773 | 9.941 0461 | 118 | o  | 49 |
|    | 10 | 9.688 1065 | 377 | 9.747 0722 | 494   | 0.252 9278 | 9.941 0343 | 118 | 50 |    |
|    | 20 | 9.688 1442 | 377 | 9.747 1216 | 494   | 0.252 8784 | 9.941 0225 | 117 | 40 |    |
|    | 30 | 9.688 1819 | 377 | 9.747 1711 | 495   | 0.252 8289 | 9.941 0108 | 118 | 30 |    |
|    | 40 | 9.688 2196 | 376 | 9.747 2205 | 495   | 0.252 7795 | 9.940 9990 | 118 | 20 |    |
|    | 50 | 9.688 2572 | 376 | 9.747 2700 | 494   | 0.252 7300 | 9.940 9872 | 117 | 10 |    |
| 12 | o  | 9.688 2949 | 377 | 9.747 3194 | 495   | 0.252 6806 | 9.940 9755 | 118 | o  | 48 |
|    | 10 | 9.688 3326 | 376 | 9.747 3689 | 494   | 0.252 6311 | 9.940 9637 | 118 | 50 |    |
|    | 20 | 9.688 3702 | 376 | 9.747 4183 | 494   | 0.252 5817 | 9.940 9519 | 117 | 40 |    |
|    | 30 | 9.688 4079 | 377 | 9.747 4677 | 494   | 0.252 5323 | 9.940 9402 | 118 | 30 |    |
|    | 40 | 9.688 4456 | 376 | 9.747 5172 | 494   | 0.252 4828 | 9.940 9284 | 118 | 20 |    |
|    | 50 | 9.688 4832 | 377 | 9.747 5666 | 494   | 0.252 4334 | 9.940 9166 | 118 | 10 |    |
| 13 | o  | 9.688 5209 | 376 | 9.747 6160 | 494   | 0.252 3840 | 9.940 9048 | 117 | o  | 47 |
|    | 10 | 9.688 5585 | 377 | 9.747 6654 | 495   | 0.252 3346 | 9.940 8931 | 118 | 50 |    |
|    | 20 | 9.688 5962 | 376 | 9.747 7149 | 494   | 0.252 2851 | 9.940 8813 | 118 | 40 |    |
|    | 30 | 9.688 6338 | 376 | 9.747 7643 | 494   | 0.252 2357 | 9.940 8695 | 118 | 30 |    |
|    | 40 | 9.688 6714 | 377 | 9.747 8137 | 494   | 0.252 1863 | 9.940 8577 | 117 | 20 |    |
|    | 50 | 9.688 7091 | 376 | 9.747 8631 | 494   | 0.252 1369 | 9.940 8460 | 118 | 10 |    |
| 14 | o  | 9.688 7467 | 376 | 9.747 9125 | 494   | 0.252 0875 | 9.940 8342 | 118 | o  | 46 |
|    | 10 | 9.688 7843 | 376 | 9.747 9619 | 494   | 0.252 0381 | 9.940 8224 | 118 | 50 |    |
|    | 20 | 9.688 8219 | 376 | 9.748 0113 | 494   | 0.251 9887 | 9.940 8106 | 118 | 40 |    |
|    | 30 | 9.688 8595 | 376 | 9.748 0607 | 494   | 0.251 9393 | 9.940 7988 | 118 | 30 |    |
|    | 40 | 9.688 8971 | 376 | 9.748 1101 | 494   | 0.251 8899 | 9.940 7870 | 118 | 20 |    |
|    | 50 | 9.688 9347 | 376 | 9.748 1595 | 494   | 0.251 8405 | 9.940 7752 | 118 | 10 |    |
| 15 | o  | 9.688 9723 | 376 | 9.748 2089 | 494   | 0.251 7911 | 9.940 7634 | 117 | o  | 45 |
|    | 10 | 9.689 0099 | 376 | 9.748 2583 | 494   | 0.251 7417 | 9.940 7517 | 118 | 50 |    |
|    | 20 | 9.689 0475 | 376 | 9.748 3077 | 493   | 0.251 6923 | 9.940 7399 | 118 | 40 |    |
|    | 30 | 9.689 0851 | 376 | 9.748 3570 | 494   | 0.251 6430 | 9.940 7281 | 118 | 30 |    |
|    | 40 | 9.689 1227 | 376 | 9.748 4064 | 494   | 0.251 5936 | 9.940 7163 | 118 | 20 |    |
|    | 50 | 9.689 1603 | 375 | 9.748 4558 | 494   | 0.251 5442 | 9.940 7045 | 118 | 10 |    |
| 16 | o  | 9.689 1978 | 376 | 9.748 5052 | 493   | 0.251 4948 | 9.940 6927 | 118 | o  | 44 |
|    | 10 | 9.689 2354 | 376 | 9.748 5545 | 494   | 0.251 4455 | 9.940 6809 | 118 | 50 |    |
|    | 20 | 9.689 2730 | 375 | 9.748 6039 | 494   | 0.251 3961 | 9.940 6691 | 118 | 40 |    |
|    | 30 | 9.689 3105 | 376 | 9.748 6533 | 493   | 0.251 3467 | 9.940 6573 | 118 | 30 |    |
|    | 40 | 9.689 3481 | 376 | 9.748 7026 | 494   | 0.251 2974 | 9.940 6455 | 118 | 20 |    |
|    | 50 | 9.689 3856 | 375 | 9.748 7520 | 493   | 0.251 2480 | 9.940 6337 | 118 | 10 |    |
| 17 | o  | 9.689 4232 | 375 | 9.748 8013 | 494   | 0.251 1987 | 9.940 6219 | 119 | o  | 43 |
|    | 10 | 9.689 4607 | 376 | 9.748 8507 | 493   | 0.251 1493 | 9.940 6100 | 118 | 50 |    |
|    | 20 | 9.689 4983 | 375 | 9.748 9000 | 494   | 0.251 1000 | 9.940 5982 | 118 | 40 |    |
|    | 30 | 9.689 5358 | 375 | 9.748 9494 | 493   | 0.251 0506 | 9.940 5864 | 118 | 30 |    |
|    | 40 | 9.689 5733 | 375 | 9.748 9987 | 493   | 0.251 0013 | 9.940 5746 | 118 | 20 |    |
|    | 50 | 9.689 6109 | 376 | 9.749 0481 | 494   | 0.250 9519 | 9.940 5628 | 118 | 10 |    |
| 18 | o  | 9.689 6484 | 375 | 9.749 0974 | 493   | 0.250 9026 | 9.940 5510 | 118 | o  | 42 |
|    | 10 | 9.689 6859 | 375 | 9.749 1467 | 494   | 0.250 8533 | 9.940 5392 | 118 | 50 |    |
|    | 20 | 9.689 7234 | 375 | 9.749 1961 | 493   | 0.250 8039 | 9.940 5274 | 119 | 40 |    |
|    | 30 | 9.689 7609 | 375 | 9.749 2454 | 493   | 0.250 7546 | 9.940 5155 | 118 | 30 |    |
|    | 40 | 9.689 7984 | 375 | 9.749 2947 | 493   | 0.250 7053 | 9.940 5037 | 118 | 20 |    |
|    | 50 | 9.689 8359 | 375 | 9.749 3440 | 494   | 0.250 6560 | 9.940 4919 | 118 | 10 |    |
| 19 | o  | 9.689 8734 | 375 | 9.749 3934 | 493   | 0.250 6066 | 9.940 4801 | 119 | o  | 41 |
|    | 10 | 9.689 9109 | 375 | 9.749 4427 | 493   | 0.250 5573 | 9.940 4682 | 118 | 50 |    |
|    | 20 | 9.689 9484 | 375 | 9.749 4920 | 493   | 0.250 5080 | 9.940 4564 | 118 | 40 |    |
|    | 30 | 9.689 9859 | 375 | 9.749 5413 | 493   | 0.250 4587 | 9.940 4446 | 118 | 30 |    |
|    | 40 | 9.690 0234 | 375 | 9.749 5906 | 493   | 0.250 4094 | 9.940 4328 | 119 | 20 |    |
|    | 50 | 9.690 0609 | 375 | 9.749 6399 | 493   | 0.250 3601 | 9.940 4209 | 118 | 10 |    |
| 20 | o  | 9.690 0983 | 374 | 9.749 6892 | 493   | 0.250 3108 | 9.940 4091 | 118 | o  | 40 |
|    |    |            |     |            |       |            |            |     |    |    |
|    | "  | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d.  | "  |    |

494  
1 49.4  
2 98.8  
3 148.2  
4 197.6  
5 247.0  
6 296.4  
7 345.8  
8 395.2  
9 444.6

493  
1 49.3  
2 98.6  
3 147.9  
4 197.2  
5 246.5  
6 295.8  
7 345.1  
8 394.4  
9 443.7

377  
1 37.7  
2 75.4  
3 113.1  
4 150.8  
5 188.5  
6 226.2  
7 263.9  
8 301.6  
9 339.3

376  
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2 75.2  
3 112.8  
4 150.4  
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375  
1 37.5  
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3 112.5  
4 150.0  
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6 225.0  
7 262.5  
8 300.0  
9 337.5

118  
1 11.8  
2 23.6  
3 35.4  
4 47.2  
5 59.0  
6 70.8  
7 82.6  
8 94.4  
9 106.2



|         |    | sin         | d.  | Tang       | d. c. | Cotg       | Cos        | d.  |    |    |
|---------|----|-------------|-----|------------|-------|------------|------------|-----|----|----|
| 493     | 20 | 0.9690 0983 | 375 | 9.749 6892 | 493   | 0.250 3108 | 9.940 4091 | 118 | 0  | 40 |
| 1 49.3  | 10 | 9.690 1358  | 375 | 9.749 7385 | 493   | 0.250 2615 | 9.940 3973 | 119 | 50 |    |
| 2 98.6  | 20 | 9.690 1733  | 375 | 9.749 7878 | 493   | 0.250 2122 | 9.940 3854 | 118 | 40 |    |
| 3 147.9 | 30 | 9.690 2107  | 374 | 9.749 8371 | 493   | 0.250 1629 | 9.940 3736 | 118 | 30 |    |
| 4 197.2 | 40 | 9.690 2482  | 375 | 9.749 8864 | 493   | 0.250 1136 | 9.940 3618 | 118 | 20 |    |
| 5 246.5 | 50 | 9.690 2856  | 374 | 9.749 9357 | 493   | 0.250 0643 | 9.940 3499 | 119 | 10 |    |
| 6 295.8 | 0  | 9.690 3231  | 375 | 9.749 9850 | 493   | 0.250 0150 | 9.940 3381 | 118 | 0  | 30 |
| 7 345.1 | 10 | 9.690 3605  | 374 | 9.750 0343 | 492   | 0.249 9657 | 9.940 3262 | 119 | 50 |    |
| 8 394.4 | 20 | 9.690 3979  | 374 | 9.750 0835 | 492   | 0.249 9165 | 9.940 3144 | 118 | 40 |    |
| 9 443.7 | 30 | 9.690 4354  | 375 | 9.750 1328 | 493   | 0.249 8672 | 9.940 3026 | 119 | 30 |    |
|         | 40 | 9.690 4728  | 374 | 9.750 1821 | 493   | 0.249 8179 | 9.940 2907 | 118 | 20 |    |
|         | 50 | 9.690 5102  | 374 | 9.750 2314 | 492   | 0.249 7686 | 9.940 2789 | 119 | 10 |    |
| 492     | 22 | 0.9690 5476 | 375 | 9.750 2806 | 493   | 0.249 7194 | 9.940 2670 | 118 | 0  | 38 |
| 1 49.2  | 10 | 9.690 5851  | 374 | 9.750 3299 | 492   | 0.249 6701 | 9.940 2552 | 119 | 50 |    |
| 2 98.4  | 20 | 9.690 6225  | 374 | 9.750 3791 | 492   | 0.249 6209 | 9.940 2433 | 118 | 40 |    |
| 3 147.6 | 30 | 9.690 6599  | 374 | 9.750 4284 | 493   | 0.249 5716 | 9.940 2315 | 118 | 30 |    |
| 4 196.8 | 40 | 9.690 6973  | 374 | 9.750 4777 | 492   | 0.249 5223 | 9.940 2196 | 119 | 20 |    |
| 5 246.0 | 50 | 9.690 7347  | 374 | 9.750 5269 | 493   | 0.249 4731 | 9.940 2078 | 119 | 10 |    |
| 6 295.2 | 0  | 9.690 7721  | 374 | 9.750 5762 | 492   | 0.249 4238 | 9.940 1959 | 118 | 0  | 37 |
| 7 344.4 | 10 | 9.690 8095  | 374 | 9.750 6254 | 493   | 0.249 3746 | 9.940 1841 | 119 | 50 |    |
| 8 393.6 | 20 | 9.690 8469  | 373 | 9.750 6747 | 492   | 0.249 3253 | 9.940 1722 | 119 | 40 |    |
| 9 442.8 | 30 | 9.690 8842  | 374 | 9.750 7239 | 492   | 0.249 2761 | 9.940 1603 | 118 | 30 |    |
|         | 40 | 9.690 9216  | 374 | 9.750 7731 | 493   | 0.249 2269 | 9.940 1485 | 119 | 20 |    |
|         | 50 | 9.690 9590  | 374 | 9.750 8224 | 492   | 0.249 1776 | 9.940 1366 | 118 | 10 |    |
| 375     | 24 | 0.9690 9964 | 373 | 9.750 8716 | 492   | 0.249 1284 | 9.940 1248 | 119 | 0  | 36 |
| 1 37.5  | 10 | 9.691 0337  | 374 | 9.750 9208 | 493   | 0.249 0792 | 9.940 1129 | 119 | 50 |    |
| 2 75.0  | 20 | 9.691 0711  | 373 | 9.750 9701 | 492   | 0.249 0299 | 9.940 1010 | 118 | 40 |    |
| 3 112.5 | 30 | 9.691 1084  | 374 | 9.751 0193 | 492   | 0.248 9807 | 9.940 0892 | 119 | 30 |    |
| 4 150.0 | 40 | 9.691 1458  | 373 | 9.751 0685 | 492   | 0.248 9315 | 9.940 0773 | 119 | 20 |    |
| 5 187.5 | 50 | 9.691 1831  | 374 | 9.751 1177 | 492   | 0.248 8823 | 9.940 0654 | 119 | 10 |    |
| 6 225.0 | 0  | 9.691 2205  | 373 | 9.751 1669 | 492   | 0.248 8331 | 9.940 0535 | 118 | 0  | 35 |
| 7 262.5 | 10 | 9.691 2578  | 374 | 9.751 2161 | 493   | 0.248 7839 | 9.940 0417 | 119 | 50 |    |
| 8 300.0 | 20 | 9.691 2952  | 373 | 9.751 2654 | 492   | 0.248 7346 | 9.940 0298 | 119 | 40 |    |
| 9 337.5 | 30 | 9.691 3325  | 373 | 9.751 3146 | 492   | 0.248 6854 | 9.940 0179 | 119 | 30 |    |
|         | 40 | 9.691 3698  | 373 | 9.751 3638 | 492   | 0.248 6362 | 9.940 0060 | 118 | 20 |    |
|         | 50 | 9.691 4071  | 374 | 9.751 4130 | 492   | 0.248 5870 | 9.939 9942 | 119 | 10 |    |
| 374     | 26 | 0.9691 4445 | 373 | 9.751 4622 | 492   | 0.248 5378 | 9.939 9823 | 119 | 0  | 34 |
| 1 37.4  | 10 | 9.691 4818  | 373 | 9.751 5114 | 492   | 0.248 4886 | 9.939 9704 | 119 | 50 |    |
| 2 74.8  | 20 | 9.691 5191  | 373 | 9.751 5606 | 492   | 0.248 4394 | 9.939 9585 | 119 | 40 |    |
| 3 112.2 | 30 | 9.691 5564  | 373 | 9.751 6097 | 491   | 0.248 3903 | 9.939 9466 | 118 | 30 |    |
| 4 149.6 | 40 | 9.691 5937  | 373 | 9.751 6589 | 492   | 0.248 3411 | 9.939 9348 | 119 | 20 |    |
| 5 187.0 | 50 | 9.691 6310  | 373 | 9.751 7081 | 492   | 0.248 2919 | 9.939 9229 | 119 | 10 |    |
| 6 224.4 | 0  | 9.691 6683  | 373 | 9.751 7573 | 492   | 0.248 2427 | 9.939 9110 | 119 | 0  | 33 |
| 7 261.8 | 10 | 9.691 7056  | 372 | 9.751 8065 | 491   | 0.248 1935 | 9.939 8991 | 119 | 50 |    |
| 8 299.2 | 20 | 9.691 7428  | 373 | 9.751 8556 | 491   | 0.248 1444 | 9.939 8872 | 119 | 40 |    |
| 9 336.6 | 30 | 9.691 7801  | 373 | 9.751 9048 | 492   | 0.248 0952 | 9.939 8753 | 119 | 30 |    |
|         | 40 | 9.691 8174  | 373 | 9.751 9540 | 491   | 0.248 0460 | 9.939 8634 | 119 | 20 |    |
|         | 50 | 9.691 8547  | 372 | 9.752 0031 | 491   | 0.247 9969 | 9.939 8515 | 119 | 10 |    |
| 373     | 28 | 0.9691 8919 | 373 | 9.752 0523 | 492   | 0.247 9477 | 9.939 8396 | 119 | 0  | 32 |
| 1 37.3  | 10 | 9.691 9292  | 373 | 9.752 1015 | 491   | 0.247 8985 | 9.939 8277 | 119 | 50 |    |
| 2 74.6  | 20 | 9.691 9665  | 372 | 9.752 1506 | 491   | 0.247 8494 | 9.939 8158 | 119 | 40 |    |
| 3 111.9 | 30 | 9.692 0037  | 373 | 9.752 1998 | 491   | 0.247 8002 | 9.939 8039 | 119 | 30 |    |
| 4 149.2 | 40 | 9.692 0410  | 372 | 9.752 2489 | 492   | 0.247 7511 | 9.939 7920 | 119 | 20 |    |
| 5 186.5 | 50 | 9.692 0782  | 373 | 9.752 2981 | 491   | 0.247 7019 | 9.939 7801 | 119 | 10 |    |
| 6 223.8 | 0  | 9.692 1155  | 372 | 9.752 3472 | 492   | 0.247 6528 | 9.939 7682 | 119 | 0  | 31 |
| 7 261.1 | 10 | 9.692 1527  | 372 | 9.752 3964 | 491   | 0.247 6036 | 9.939 7563 | 119 | 50 |    |
| 8 298.4 | 20 | 9.692 1899  | 373 | 9.752 4455 | 492   | 0.247 5545 | 9.939 7444 | 119 | 40 |    |
| 9 335.7 | 30 | 9.692 2272  | 372 | 9.752 4947 | 491   | 0.247 5053 | 9.939 7325 | 119 | 30 |    |
|         | 40 | 9.692 2644  | 372 | 9.752 5438 | 491   | 0.247 4562 | 9.939 7206 | 119 | 20 |    |
|         | 50 | 9.692 3016  | 372 | 9.752 5929 | 491   | 0.247 4071 | 9.939 7087 | 119 | 10 |    |
| 118     | 30 | 0.9692 3388 | 372 | 9.752 6420 | 491   | 0.247 3580 | 9.939 6968 | 119 | 0  | 30 |
| 1 11.8  |    |             |     |            |       |            |            |     |    |    |
| 2 23.6  |    |             |     |            |       |            |            |     |    |    |
| 3 35.4  |    |             |     |            |       |            |            |     |    |    |
| 4 47.2  |    |             |     |            |       |            |            |     |    |    |
| 5 59.0  |    |             |     |            |       |            |            |     |    |    |
| 6 70.8  |    |             |     |            |       |            |            |     |    |    |
| 7 82.6  |    |             |     |            |       |            |            |     |    |    |
| 8 94.4  |    |             |     |            |       |            |            |     |    |    |
| 9 106.2 |    |             |     |            |       |            |            |     |    |    |
|         |    | Cos         | d.  | Cotg       | d. c. | Tang       | sin        | d.  |    |    |



|    | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d.  | "  |    |
|----|----|------------|-----|------------|-------|------------|------------|-----|----|----|
| 30 | 0  | 9.692 3388 | 372 | 9.752 6420 | 492   | 0.247 3580 | 9.939 6968 | 119 | 0  | 30 |
|    | 10 | 9.692 3760 | 372 | 9.752 6912 | 491   | 0.247 3088 | 9.939 6849 | 120 | 50 |    |
|    | 20 | 9.692 4132 | 372 | 9.752 7403 | 491   | 0.247 2597 | 9.939 6729 | 119 | 40 |    |
|    | 30 | 9.692 4504 | 372 | 9.752 7894 | 491   | 0.247 2106 | 9.939 6610 | 119 | 30 |    |
|    | 40 | 9.692 4876 | 372 | 9.752 8385 | 491   | 0.247 1615 | 9.939 6491 | 119 | 20 |    |
|    | 50 | 9.692 5248 | 372 | 9.752 8876 | 492   | 0.247 1124 | 9.939 6372 | 119 | 10 |    |
| 31 | 0  | 9.692 5620 | 372 | 9.752 9368 | 491   | 0.247 0632 | 9.939 6253 | 119 | 0  | 29 |
|    | 10 | 9.692 5992 | 372 | 9.752 9859 | 491   | 0.247 0141 | 9.939 6134 | 120 | 50 |    |
|    | 20 | 9.692 6364 | 372 | 9.753 0350 | 491   | 0.246 9650 | 9.939 6014 | 119 | 40 |    |
|    | 30 | 9.692 6736 | 372 | 9.753 0841 | 491   | 0.246 9159 | 9.939 5895 | 119 | 30 |    |
|    | 40 | 9.692 7108 | 371 | 9.753 1332 | 491   | 0.246 8668 | 9.939 5776 | 119 | 20 |    |
|    | 50 | 9.692 7479 | 372 | 9.753 1823 | 491   | 0.246 8177 | 9.939 5657 | 120 | 10 |    |
| 32 | 0  | 9.692 7851 | 372 | 9.753 2314 | 491   | 0.246 7686 | 9.939 5537 | 119 | 0  | 28 |
|    | 10 | 9.692 8223 | 371 | 9.753 2805 | 491   | 0.246 7195 | 9.939 5418 | 119 | 50 |    |
|    | 20 | 9.692 8594 | 372 | 9.753 3296 | 490   | 0.246 6704 | 9.939 5299 | 120 | 40 |    |
|    | 30 | 9.692 8966 | 371 | 9.753 3786 | 491   | 0.246 6214 | 9.939 5179 | 119 | 30 |    |
|    | 40 | 9.692 9337 | 372 | 9.753 4277 | 491   | 0.246 5723 | 9.939 5060 | 119 | 20 |    |
|    | 50 | 9.692 9709 | 371 | 9.753 4768 | 491   | 0.246 5232 | 9.939 4941 | 120 | 10 |    |
| 33 | 0  | 9.693 0080 | 371 | 9.753 5259 | 491   | 0.246 4741 | 9.939 4821 | 119 | 0  | 27 |
|    | 10 | 9.693 0451 | 372 | 9.753 5750 | 490   | 0.246 4250 | 9.939 4702 | 119 | 50 |    |
|    | 20 | 9.693 0823 | 371 | 9.753 6240 | 491   | 0.246 3760 | 9.939 4583 | 120 | 40 |    |
|    | 30 | 9.693 1194 | 371 | 9.753 6731 | 491   | 0.246 3269 | 9.939 4464 | 119 | 30 |    |
|    | 40 | 9.693 1565 | 372 | 9.753 7222 | 490   | 0.246 2778 | 9.939 4344 | 120 | 20 |    |
|    | 50 | 9.693 1937 | 371 | 9.753 7712 | 491   | 0.246 2288 | 9.939 4224 | 119 | 10 |    |
| 34 | 0  | 9.693 2308 | 371 | 9.753 8203 | 490   | 0.246 1797 | 9.939 4105 | 120 | 0  | 26 |
|    | 10 | 9.693 2679 | 371 | 9.753 8693 | 491   | 0.246 1307 | 9.939 3985 | 119 | 50 |    |
|    | 20 | 9.693 3050 | 371 | 9.753 9184 | 490   | 0.246 0816 | 9.939 3866 | 120 | 40 |    |
|    | 30 | 9.693 3421 | 371 | 9.753 9674 | 491   | 0.246 0326 | 9.939 3746 | 119 | 30 |    |
|    | 40 | 9.693 3792 | 371 | 9.754 0165 | 490   | 0.245 9835 | 9.939 3627 | 120 | 20 |    |
|    | 50 | 9.693 4163 | 371 | 9.754 0655 | 491   | 0.245 9345 | 9.939 3507 | 119 | 10 |    |
| 35 | 0  | 9.693 4534 | 371 | 9.754 1146 | 490   | 0.245 8854 | 9.939 3388 | 120 | 0  | 25 |
|    | 10 | 9.693 4905 | 370 | 9.754 1636 | 491   | 0.245 8364 | 9.939 3268 | 119 | 50 |    |
|    | 20 | 9.693 5275 | 371 | 9.754 2127 | 490   | 0.245 7873 | 9.939 3149 | 120 | 40 |    |
|    | 30 | 9.693 5646 | 371 | 9.754 2617 | 490   | 0.245 7383 | 9.939 3029 | 119 | 30 |    |
|    | 40 | 9.693 6017 | 371 | 9.754 3107 | 491   | 0.245 6893 | 9.939 2910 | 120 | 20 |    |
|    | 50 | 9.693 6388 | 370 | 9.754 3598 | 490   | 0.245 6402 | 9.939 2790 | 119 | 10 |    |
| 36 | 0  | 9.693 6758 | 371 | 9.754 4088 | 490   | 0.245 5912 | 9.939 2671 | 120 | 0  | 24 |
|    | 10 | 9.693 7129 | 371 | 9.754 4578 | 490   | 0.245 5422 | 9.939 2551 | 120 | 50 |    |
|    | 20 | 9.693 7500 | 370 | 9.754 5068 | 490   | 0.245 4932 | 9.939 2431 | 119 | 40 |    |
|    | 30 | 9.693 7870 | 371 | 9.754 5558 | 491   | 0.245 4442 | 9.939 2312 | 120 | 30 |    |
|    | 40 | 9.693 8241 | 370 | 9.754 6049 | 490   | 0.245 3951 | 9.939 2192 | 120 | 20 |    |
|    | 50 | 9.693 8611 | 370 | 9.754 6539 | 490   | 0.245 3461 | 9.939 2072 | 119 | 10 |    |
| 37 | 0  | 9.693 8981 | 371 | 9.754 7029 | 490   | 0.245 2971 | 9.939 1953 | 120 | 0  | 23 |
|    | 10 | 9.693 9352 | 370 | 9.754 7519 | 490   | 0.245 2481 | 9.939 1833 | 120 | 50 |    |
|    | 20 | 9.693 9722 | 370 | 9.754 8009 | 490   | 0.245 1991 | 9.939 1713 | 120 | 40 |    |
|    | 30 | 9.694 0092 | 371 | 9.754 8499 | 490   | 0.245 1501 | 9.939 1593 | 119 | 30 |    |
|    | 40 | 9.694 0463 | 370 | 9.754 8989 | 490   | 0.245 1011 | 9.939 1474 | 120 | 20 |    |
|    | 50 | 9.694 0833 | 370 | 9.754 9479 | 490   | 0.245 0521 | 9.939 1354 | 120 | 10 |    |
| 38 | 0  | 9.694 1203 | 370 | 9.754 9969 | 490   | 0.245 0031 | 9.939 1234 | 120 | 0  | 22 |
|    | 10 | 9.694 1573 | 370 | 9.755 0459 | 490   | 0.244 9541 | 9.939 1114 | 119 | 50 |    |
|    | 20 | 9.694 1943 | 370 | 9.755 0949 | 489   | 0.244 9051 | 9.939 0995 | 120 | 40 |    |
|    | 30 | 9.694 2313 | 370 | 9.755 1438 | 490   | 0.244 8562 | 9.939 0875 | 120 | 30 |    |
|    | 40 | 9.694 2683 | 370 | 9.755 1928 | 490   | 0.244 8072 | 9.939 0755 | 120 | 20 |    |
|    | 50 | 9.694 3053 | 370 | 9.755 2418 | 490   | 0.244 7582 | 9.939 0635 | 120 | 10 |    |
| 39 | 0  | 9.694 3423 | 370 | 9.755 2908 | 489   | 0.244 7092 | 9.939 0515 | 119 | 0  | 21 |
|    | 10 | 9.694 3793 | 370 | 9.755 3397 | 490   | 0.244 6603 | 9.939 0396 | 120 | 50 |    |
|    | 20 | 9.694 4163 | 370 | 9.755 3887 | 490   | 0.244 6113 | 9.939 0276 | 120 | 40 |    |
|    | 30 | 9.694 4533 | 369 | 9.755 4377 | 489   | 0.244 5623 | 9.939 0156 | 120 | 30 |    |
|    | 40 | 9.694 4902 | 370 | 9.755 4866 | 490   | 0.244 5134 | 9.939 0036 | 120 | 20 |    |
|    | 50 | 9.694 5272 | 370 | 9.755 5356 | 490   | 0.244 4644 | 9.938 9916 | 120 | 10 |    |
| 40 | 0  | 9.694 5642 | 370 | 9.755 5846 | 490   | 0.244 4154 | 9.938 9796 | 120 | 0  | 20 |
|    | "  | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d.  | "  |    |

491  
1 49.1  
2 98.2  
3 147.3  
4 196.4  
5 245.5  
6 294.6  
7 343.7  
8 392.8  
9 441.9

480  
1 49.0  
2 98.0  
3 147.0  
4 196.0  
5 245.0  
6 294.0  
7 343.0  
8 392.0  
9 441.0

372  
1 37.2  
2 74.4  
3 111.6  
4 148.8  
5 186.0  
6 223.2  
7 260.4  
8 297.6  
9 334.8

371  
1 37.1  
2 74.2  
3 111.3  
4 148.4  
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6 222.6  
7 259.7  
8 296.8  
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370  
1 37.0  
2 74.0  
3 111.0  
4 148.0  
5 185.0  
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7 259.0  
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9 333.0

119  
1 11.9  
2 23.8  
3 35.7  
4 47.6  
5 59.5  
6 71.4  
7 83.3  
8 95.2  
9 107.1







|    | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d.  | "  |    |
|----|----|------------|-----|------------|-------|------------|------------|-----|----|----|
| 50 | o  | 9.696 7745 | 367 | 9.758 5170 | 487   | 0.241 4830 | 9.938 2576 | 121 | o  | 10 |
|    | 10 | 9.696 8112 | 367 | 9.758 5657 | 488   | 0.241 4343 | 9.938 2455 | 121 | 50 |    |
|    | 20 | 9.696 8479 | 367 | 9.758 6145 | 488   | 0.241 3855 | 9.938 2334 | 121 | 40 |    |
|    | 30 | 9.696 8846 | 367 | 9.758 6633 | 488   | 0.241 3367 | 9.938 2213 | 121 | 30 |    |
|    | 40 | 9.696 9213 | 367 | 9.758 7121 | 488   | 0.241 2879 | 9.938 2092 | 120 | 20 |    |
|    | 50 | 9.696 9580 | 367 | 9.758 7609 | 487   | 0.241 2391 | 9.938 1972 | 121 | 10 |    |
| 51 | o  | 9.696 9947 | 367 | 9.758 8096 | 488   | 0.241 1904 | 9.938 1851 | 121 | o  | 9  |
|    | 10 | 9.697 0314 | 367 | 9.758 8584 | 488   | 0.241 1416 | 9.938 1730 | 121 | 50 |    |
|    | 20 | 9.697 0681 | 367 | 9.758 9072 | 487   | 0.241 0928 | 9.938 1609 | 121 | 40 |    |
|    | 30 | 9.697 1048 | 367 | 9.758 9559 | 488   | 0.241 0441 | 9.938 1488 | 121 | 30 |    |
|    | 40 | 9.697 1415 | 366 | 9.759 0047 | 488   | 0.240 9953 | 9.938 1367 | 120 | 20 |    |
|    | 50 | 9.697 1781 | 367 | 9.759 0535 | 487   | 0.240 9465 | 9.938 1247 | 121 | 10 |    |
| 52 | o  | 9.697 2148 | 367 | 9.759 1022 | 488   | 0.240 8978 | 9.938 1126 | 121 | o  | 8  |
|    | 10 | 9.697 2515 | 366 | 9.759 1510 | 487   | 0.240 8490 | 9.938 1005 | 121 | 50 |    |
|    | 20 | 9.697 2881 | 367 | 9.759 1997 | 488   | 0.240 8003 | 9.938 0884 | 121 | 40 |    |
|    | 30 | 9.697 3248 | 366 | 9.759 2485 | 487   | 0.240 7515 | 9.938 0763 | 121 | 30 |    |
|    | 40 | 9.697 3614 | 367 | 9.759 2972 | 488   | 0.240 7028 | 9.938 0642 | 121 | 20 |    |
|    | 50 | 9.697 3981 | 366 | 9.759 3460 | 487   | 0.240 6540 | 9.938 0521 | 121 | 10 |    |
| 53 | o  | 9.697 4347 | 366 | 9.759 3947 | 488   | 0.240 6053 | 9.938 0400 | 121 | o  | 7  |
|    | 10 | 9.697 4713 | 367 | 9.759 4435 | 487   | 0.240 5565 | 9.938 0279 | 121 | 50 |    |
|    | 20 | 9.697 5080 | 366 | 9.759 4922 | 487   | 0.240 5078 | 9.938 0158 | 121 | 40 |    |
|    | 30 | 9.697 5446 | 366 | 9.759 5409 | 488   | 0.240 4591 | 9.938 0037 | 121 | 30 |    |
|    | 40 | 9.697 5812 | 367 | 9.759 5897 | 487   | 0.240 4103 | 9.937 9916 | 121 | 20 |    |
|    | 50 | 9.697 6179 | 366 | 9.759 6384 | 487   | 0.240 3616 | 9.937 9795 | 121 | 10 |    |
| 54 | o  | 9.697 6545 | 366 | 9.759 6871 | 487   | 0.240 3129 | 9.937 9674 | 121 | o  | 6  |
|    | 10 | 9.697 6911 | 366 | 9.759 7358 | 487   | 0.240 2642 | 9.937 9553 | 121 | 50 |    |
|    | 20 | 9.697 7277 | 366 | 9.759 7845 | 488   | 0.240 2155 | 9.937 9432 | 122 | 40 |    |
|    | 30 | 9.697 7643 | 366 | 9.759 8333 | 487   | 0.240 1667 | 9.937 9310 | 121 | 30 |    |
|    | 40 | 9.697 8009 | 366 | 9.759 8820 | 487   | 0.240 1180 | 9.937 9189 | 121 | 20 |    |
|    | 50 | 9.697 8375 | 366 | 9.759 9307 | 487   | 0.240 0693 | 9.937 9068 | 121 | 10 |    |
| 55 | o  | 9.697 8741 | 366 | 9.759 9794 | 487   | 0.240 0206 | 9.937 8947 | 121 | o  | 5  |
|    | 10 | 9.697 9107 | 366 | 9.760 0281 | 487   | 0.239 9719 | 9.937 8826 | 121 | 50 |    |
|    | 20 | 9.697 9473 | 366 | 9.760 0768 | 487   | 0.239 9232 | 9.937 8705 | 121 | 40 |    |
|    | 30 | 9.697 9839 | 365 | 9.760 1255 | 487   | 0.239 8745 | 9.937 8584 | 122 | 30 |    |
|    | 40 | 9.698 0204 | 366 | 9.760 1742 | 487   | 0.239 8258 | 9.937 8462 | 121 | 20 |    |
|    | 50 | 9.698 0570 | 366 | 9.760 2229 | 487   | 0.239 7771 | 9.937 8341 | 121 | 10 |    |
| 56 | o  | 9.698 0936 | 365 | 9.760 2716 | 487   | 0.239 7284 | 9.937 8220 | 121 | o  | 4  |
|    | 10 | 9.698 1301 | 366 | 9.760 3203 | 487   | 0.239 6797 | 9.937 8099 | 122 | 50 |    |
|    | 20 | 9.698 1667 | 366 | 9.760 3690 | 486   | 0.239 6310 | 9.937 7977 | 121 | 40 |    |
|    | 30 | 9.698 2033 | 365 | 9.760 4176 | 487   | 0.239 5824 | 9.937 7856 | 121 | 30 |    |
|    | 40 | 9.698 2398 | 366 | 9.760 4663 | 487   | 0.239 5337 | 9.937 7735 | 121 | 20 |    |
|    | 50 | 9.698 2764 | 365 | 9.760 5150 | 487   | 0.239 4850 | 9.937 7614 | 122 | 10 |    |
| 57 | o  | 9.698 3129 | 365 | 9.760 5637 | 487   | 0.239 4363 | 9.937 7492 | 121 | o  | 3  |
|    | 10 | 9.698 3494 | 366 | 9.760 6124 | 486   | 0.239 3876 | 9.937 7371 | 121 | 50 |    |
|    | 20 | 9.698 3860 | 365 | 9.760 6610 | 487   | 0.239 3390 | 9.937 7250 | 122 | 40 |    |
|    | 30 | 9.698 4225 | 365 | 9.760 7097 | 487   | 0.239 2903 | 9.937 7128 | 121 | 30 |    |
|    | 40 | 9.698 4590 | 366 | 9.760 7584 | 486   | 0.239 2416 | 9.937 7007 | 122 | 20 |    |
|    | 50 | 9.698 4956 | 365 | 9.760 8070 | 487   | 0.239 1930 | 9.937 6885 | 121 | 10 |    |
| 58 | o  | 9.698 5321 | 365 | 9.760 8557 | 486   | 0.239 1443 | 9.937 6764 | 121 | o  | 2  |
|    | 10 | 9.698 5686 | 365 | 9.760 9043 | 487   | 0.239 0957 | 9.937 6643 | 122 | 50 |    |
|    | 20 | 9.698 6051 | 365 | 9.760 9530 | 486   | 0.239 0470 | 9.937 6521 | 121 | 40 |    |
|    | 30 | 9.698 6416 | 365 | 9.761 0016 | 487   | 0.238 9984 | 9.937 6400 | 122 | 30 |    |
|    | 40 | 9.698 6781 | 365 | 9.761 0503 | 486   | 0.238 9497 | 9.937 6278 | 121 | 20 |    |
|    | 50 | 9.698 7146 | 365 | 9.761 0989 | 487   | 0.238 9011 | 9.937 6157 | 122 | 10 |    |
| 59 | o  | 9.698 7511 | 365 | 9.761 1476 | 486   | 0.238 8524 | 9.937 6035 | 121 | o  | 1  |
|    | 10 | 9.698 7876 | 365 | 9.761 1962 | 487   | 0.238 8038 | 9.937 5914 | 122 | 50 |    |
|    | 20 | 9.698 8241 | 365 | 9.761 2449 | 486   | 0.238 7551 | 9.937 5792 | 121 | 40 |    |
|    | 30 | 9.698 8606 | 365 | 9.761 2935 | 486   | 0.238 7065 | 9.937 5671 | 122 | 30 |    |
|    | 40 | 9.698 8971 | 364 | 9.761 3421 | 486   | 0.238 6579 | 9.937 5549 | 121 | 20 |    |
|    | 50 | 9.698 9335 | 365 | 9.761 3907 | 487   | 0.238 6093 | 9.937 5428 | 122 | 10 |    |
| 60 | o  | 9.698 9700 | 365 | 9.761 4394 | 487   | 0.238 5606 | 9.937 5306 | 122 | o  | 0  |
|    | "  | Cos        | d.  | Cotg       | d. c. | Tang       |            | d.  | "  |    |

487

1 41.7  
2 97.4  
3 145.1  
4 194.8  
5 243.5  
6 292.2  
7 340.7  
8 389.4  
9 438.1

486

1 49.6  
2 97.2  
3 145.1  
4 194.8  
5 243.5  
6 292.2  
7 340.7  
8 389.4  
9 437.4

366

1 35.6  
2 73.2  
3 110.9  
4 148.4  
5 185.9  
6 223.5  
7 261.2  
8 298.8  
9 336.4

365

1 36.5  
2 73.0  
3 109.5  
4 145.9  
5 182.5  
6 219.0  
7 255.5  
8 292.0  
9 328.5

121

1 12.1  
2 24.2  
3 36.3  
4 48.4  
5 60.5  
6 72.6  
7 84.7  
8 96.8  
9 108.9

122

1 12.1  
2 24.4  
3 36.6  
4 48.8  
5 61.0  
6 73.2  
7 85.4  
8 97.6  
9 109.8



[illegible]



| "  | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d.  | "  | "  |
|----|----|------------|-----|------------|-------|------------|------------|-----|----|----|
| 10 | 0  | 9.701 1508 | 362 | 9.764 3520 | 485   | 0.235 6480 | 9.936 7988 | 122 | 0  | 50 |
|    | 10 | 9.701 1870 | 362 | 9.764 4005 | 484   | 0.235 5995 | 9.936 7866 | 123 | 50 |    |
|    | 20 | 9.701 2232 | 362 | 9.764 4489 | 485   | 0.235 5511 | 9.936 7743 | 122 | 40 |    |
|    | 30 | 9.701 2595 | 362 | 9.764 4974 | 484   | 0.235 5026 | 9.936 7621 | 123 | 30 |    |
|    | 40 | 9.701 2957 | 362 | 9.764 5458 | 485   | 0.235 4542 | 9.936 7498 | 122 | 20 |    |
|    | 50 | 9.701 3319 | 362 | 9.764 5943 | 484   | 0.235 4057 | 9.936 7376 | 122 | 10 |    |
| 11 | 0  | 9.701 3681 | 362 | 9.764 6427 | 485   | 0.235 3573 | 9.936 7254 | 123 | 0  | 49 |
|    | 10 | 9.701 4043 | 362 | 9.764 6912 | 484   | 0.235 3088 | 9.936 7131 | 122 | 50 |    |
|    | 20 | 9.701 4405 | 362 | 9.764 7396 | 485   | 0.235 2604 | 9.936 7009 | 123 | 40 |    |
|    | 30 | 9.701 4767 | 361 | 9.764 7881 | 484   | 0.235 2119 | 9.936 6886 | 122 | 30 |    |
|    | 40 | 9.701 5128 | 362 | 9.764 8365 | 484   | 0.235 1635 | 9.936 6764 | 123 | 20 |    |
|    | 50 | 9.701 5490 | 362 | 9.764 8849 | 485   | 0.235 1151 | 9.936 6641 | 122 | 10 |    |
| 12 | 0  | 9.701 5852 | 362 | 9.764 9334 | 484   | 0.235 0666 | 9.936 6519 | 123 | 0  | 48 |
|    | 10 | 9.701 6214 | 362 | 9.764 9818 | 484   | 0.235 0182 | 9.936 6396 | 123 | 50 |    |
|    | 20 | 9.701 6576 | 361 | 9.765 0302 | 484   | 0.234 9698 | 9.936 6273 | 122 | 40 |    |
|    | 30 | 9.701 6937 | 362 | 9.765 0786 | 485   | 0.234 9214 | 9.936 6151 | 123 | 30 |    |
|    | 40 | 9.701 7299 | 361 | 9.765 1271 | 484   | 0.234 8729 | 9.936 6028 | 122 | 20 |    |
|    | 50 | 9.701 7660 | 362 | 9.765 1755 | 484   | 0.234 8245 | 9.936 5906 | 123 | 10 |    |
| 13 | 0  | 9.701 8022 | 361 | 9.765 2239 | 484   | 0.234 7761 | 9.936 5783 | 123 | 0  | 47 |
|    | 10 | 9.701 8383 | 362 | 9.765 2723 | 484   | 0.234 7277 | 9.936 5660 | 122 | 50 |    |
|    | 20 | 9.701 8745 | 361 | 9.765 3207 | 484   | 0.234 6793 | 9.936 5538 | 123 | 40 |    |
|    | 30 | 9.701 9106 | 362 | 9.765 3691 | 484   | 0.234 6309 | 9.936 5415 | 123 | 30 |    |
|    | 40 | 9.701 9468 | 361 | 9.765 4175 | 484   | 0.234 5825 | 9.936 5292 | 122 | 20 |    |
|    | 50 | 9.701 9829 | 361 | 9.765 4659 | 484   | 0.234 5341 | 9.936 5170 | 123 | 10 |    |
| 14 | 0  | 9.702 0190 | 362 | 9.765 5143 | 484   | 0.234 4857 | 9.936 5047 | 123 | 0  | 46 |
|    | 10 | 9.702 0552 | 361 | 9.765 5627 | 484   | 0.234 4373 | 9.936 4924 | 122 | 50 |    |
|    | 20 | 9.702 0913 | 361 | 9.765 6111 | 484   | 0.234 3889 | 9.936 4802 | 123 | 40 |    |
|    | 30 | 9.702 1274 | 361 | 9.765 6595 | 484   | 0.234 3405 | 9.936 4679 | 123 | 30 |    |
|    | 40 | 9.702 1635 | 361 | 9.765 7079 | 484   | 0.234 2921 | 9.936 4556 | 123 | 20 |    |
|    | 50 | 9.702 1996 | 361 | 9.765 7563 | 484   | 0.234 2437 | 9.936 4433 | 122 | 10 |    |
| 15 | 0  | 9.702 2357 | 361 | 9.765 8047 | 484   | 0.234 1953 | 9.936 4311 | 123 | 0  | 45 |
|    | 10 | 9.702 2718 | 361 | 9.765 8531 | 483   | 0.234 1469 | 9.936 4188 | 123 | 50 |    |
|    | 20 | 9.702 3079 | 361 | 9.765 9014 | 484   | 0.234 0986 | 9.936 4065 | 123 | 40 |    |
|    | 30 | 9.702 3440 | 361 | 9.765 9498 | 484   | 0.234 0502 | 9.936 3942 | 123 | 30 |    |
|    | 40 | 9.702 3801 | 361 | 9.765 9982 | 484   | 0.234 0018 | 9.936 3819 | 123 | 20 |    |
|    | 50 | 9.702 4162 | 361 | 9.766 0466 | 483   | 0.233 9534 | 9.936 3696 | 122 | 10 |    |
| 16 | 0  | 9.702 4523 | 361 | 9.766 0949 | 484   | 0.233 9051 | 9.936 3574 | 123 | 0  | 44 |
|    | 10 | 9.702 4884 | 360 | 9.766 1433 | 484   | 0.233 8567 | 9.936 3451 | 123 | 50 |    |
|    | 20 | 9.702 5244 | 361 | 9.766 1917 | 483   | 0.233 8083 | 9.936 3328 | 123 | 40 |    |
|    | 30 | 9.702 5605 | 361 | 9.766 2400 | 484   | 0.233 7600 | 9.936 3205 | 123 | 30 |    |
|    | 40 | 9.702 5966 | 360 | 9.766 2884 | 483   | 0.233 7116 | 9.936 3082 | 123 | 20 |    |
|    | 50 | 9.702 6326 | 361 | 9.766 3367 | 484   | 0.233 6633 | 9.936 2959 | 123 | 10 |    |
| 17 | 0  | 9.702 6687 | 360 | 9.766 3851 | 483   | 0.233 6149 | 9.936 2836 | 123 | 0  | 43 |
|    | 10 | 9.702 7047 | 361 | 9.766 4334 | 484   | 0.233 5666 | 9.936 2713 | 123 | 50 |    |
|    | 20 | 9.702 7408 | 360 | 9.766 4818 | 483   | 0.233 5182 | 9.936 2590 | 123 | 40 |    |
|    | 30 | 9.702 7768 | 361 | 9.766 5301 | 484   | 0.233 4699 | 9.936 2467 | 123 | 30 |    |
|    | 40 | 9.702 8129 | 360 | 9.766 5785 | 483   | 0.233 4215 | 9.936 2344 | 123 | 20 |    |
|    | 50 | 9.702 8489 | 360 | 9.766 6268 | 483   | 0.233 3732 | 9.936 2221 | 123 | 10 |    |
| 18 | 0  | 9.702 8849 | 361 | 9.766 6751 | 484   | 0.233 3249 | 9.936 2098 | 123 | 0  | 42 |
|    | 10 | 9.702 9210 | 360 | 9.766 7235 | 483   | 0.233 2765 | 9.936 1975 | 123 | 50 |    |
|    | 20 | 9.702 9570 | 360 | 9.766 7718 | 483   | 0.233 2282 | 9.936 1852 | 123 | 40 |    |
|    | 30 | 9.702 9930 | 360 | 9.766 8201 | 484   | 0.233 1799 | 9.936 1729 | 123 | 30 |    |
|    | 40 | 9.703 0290 | 361 | 9.766 8685 | 483   | 0.233 1315 | 9.936 1606 | 123 | 20 |    |
|    | 50 | 9.703 0651 | 360 | 9.766 9168 | 483   | 0.233 0832 | 9.936 1483 | 123 | 10 |    |
| 19 | 0  | 9.703 1011 | 360 | 9.766 9651 | 483   | 0.233 0349 | 9.936 1360 | 124 | 0  | 41 |
|    | 10 | 9.703 1371 | 360 | 9.767 0134 | 483   | 0.232 9866 | 9.936 1236 | 123 | 50 |    |
|    | 20 | 9.703 1731 | 360 | 9.767 0617 | 484   | 0.232 9383 | 9.936 1113 | 123 | 40 |    |
|    | 30 | 9.703 2091 | 360 | 9.767 1101 | 483   | 0.232 8899 | 9.936 0990 | 123 | 30 |    |
|    | 40 | 9.703 2451 | 360 | 9.767 1584 | 483   | 0.232 8416 | 9.936 0867 | 123 | 20 |    |
|    | 50 | 9.703 2811 | 359 | 9.767 2067 | 483   | 0.232 7933 | 9.936 0744 | 123 | 10 |    |
| 20 | 0  | 9.703 3170 |     | 9.767 2550 |       | 0.232 7450 | 9.936 0621 |     | 0  | 40 |
|    |    | Cos        | d.  | Cotg       | d. c. | Tang       |            |     | d. | "  |



|         | <i>r</i> | <i>n</i> | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d.  | <i>n</i> | <i>r</i> |
|---------|----------|----------|------------|-----|------------|-------|------------|------------|-----|----------|----------|
| 483     | 20       | 0        | 9.703 3170 | 360 | 9.767 2550 | 481   | 0.212 7450 | 9.916 6621 | 124 | 0        | 40       |
| 1 48.1  | 10       | 10       | 9.703 3530 | 360 | 9.767 3011 | 481   | 0.212 6907 | 9.916 6197 | 124 | 50       |          |
| 2 96.6  | 20       | 20       | 9.703 3890 | 360 | 9.767 3516 | 481   | 0.212 6381 | 9.916 5774 | 124 | 40       |          |
| 3 144.9 | 30       | 30       | 9.703 4250 | 360 | 9.767 3999 | 481   | 0.212 5871 | 9.916 5351 | 124 | 30       |          |
| 4 193.4 | 40       | 40       | 9.703 4609 | 359 | 9.767 4481 | 481   | 0.212 5378 | 9.916 4928 | 124 | 20       |          |
| 5 241.5 | 50       | 50       | 9.703 4969 | 360 | 9.767 4965 | 481   | 0.212 4905 | 9.916 4504 | 124 | 10       |          |
| 6 289.8 | 0        | 0        | 9.703 5329 | 360 | 9.767 5448 | 481   | 0.212 4452 | 9.916 4081 | 124 | 0        | 39       |
| 7 338.1 | 10       | 10       | 9.703 5688 | 360 | 9.767 5910 | 481   | 0.212 4020 | 9.916 3658 | 124 | 50       |          |
| 8 386.4 | 20       | 20       | 9.703 6048 | 359 | 9.767 6413 | 481   | 0.212 3607 | 9.916 3235 | 124 | 40       |          |
| 9 434.7 | 30       | 30       | 9.703 6407 | 360 | 9.767 6896 | 481   | 0.212 3204 | 9.916 2812 | 124 | 30       |          |
| 483     | 40       | 40       | 9.703 6767 | 359 | 9.767 7379 | 481   | 0.212 2821 | 9.916 2388 | 124 | 20       |          |
| 1 48.2  | 50       | 50       | 9.703 7126 | 360 | 9.767 7863 | 481   | 0.212 2458 | 9.916 2005 | 124 | 10       |          |
| 2 96.4  | 0        | 0        | 9.703 7486 | 359 | 9.767 8344 | 481   | 0.212 2106 | 9.916 1621 | 124 | 0        | 38       |
| 3 144.6 | 10       | 10       | 9.703 7845 | 359 | 9.767 8827 | 481   | 0.212 1774 | 9.916 1238 | 124 | 50       |          |
| 4 192.8 | 20       | 20       | 9.703 8204 | 359 | 9.767 9310 | 481   | 0.212 1452 | 9.916 8504 | 124 | 40       |          |
| 5 241.0 | 30       | 30       | 9.703 8563 | 360 | 9.767 9792 | 481   | 0.212 1140 | 9.916 8077 | 124 | 30       |          |
| 6 289.2 | 40       | 40       | 9.703 8921 | 359 | 9.768 0275 | 481   | 0.212 828  | 9.916 7648 | 124 | 20       |          |
| 7 337.4 | 50       | 50       | 9.703 9282 | 359 | 9.768 0758 | 481   | 0.212 5212 | 9.916 7221 | 124 | 10       |          |
| 8 385.6 | 0        | 0        | 9.703 9641 | 359 | 9.768 1241 | 481   | 0.212 2146 | 9.916 6794 | 124 | 0        | 37       |
| 9 433.8 | 10       | 10       | 9.704 0001 | 359 | 9.768 1721 | 481   | 0.212 1877 | 9.916 6377 | 124 | 50       |          |
| 350     | 20       | 20       | 9.704 0359 | 359 | 9.768 2205 | 481   | 0.212 1607 | 9.916 5954 | 124 | 40       |          |
| 1 35.0  | 30       | 30       | 9.704 0718 | 359 | 9.768 2688 | 481   | 0.212 1343 | 9.916 5531 | 124 | 30       |          |
| 2 91.8  | 40       | 40       | 9.704 1077 | 359 | 9.768 3170 | 481   | 0.212 1084 | 9.916 5107 | 124 | 20       |          |
| 3 139.7 | 50       | 50       | 9.704 1436 | 359 | 9.768 3651 | 481   | 0.212 827  | 9.916 4684 | 124 | 10       |          |
| 4 187.5 | 0        | 0        | 9.704 1795 | 359 | 9.768 4135 | 481   | 0.212 5805 | 9.916 4261 | 124 | 0        | 36       |
| 5 235.4 | 10       | 10       | 9.704 2154 | 359 | 9.768 4617 | 481   | 0.212 3381 | 9.916 3838 | 124 | 50       |          |
| 6 283.1 | 20       | 20       | 9.704 2513 | 358 | 9.768 5095 | 481   | 0.212 1000 | 9.916 3414 | 124 | 40       |          |
| 7 330.9 | 30       | 30       | 9.704 2871 | 358 | 9.768 5582 | 481   | 0.212 8618 | 9.916 2991 | 124 | 30       |          |
| 8 378.7 | 40       | 40       | 9.704 3230 | 359 | 9.768 6065 | 481   | 0.212 6245 | 9.916 2568 | 124 | 20       |          |
| 9 426.4 | 50       | 50       | 9.704 3589 | 358 | 9.768 6547 | 481   | 0.212 3871 | 9.916 2144 | 124 | 10       |          |
| 183     | 0        | 0        | 9.704 3947 | 359 | 9.768 7029 | 481   | 0.212 1497 | 9.916 1721 | 124 | 0        | 35       |
| 1 18.3  | 10       | 10       | 9.704 4306 | 359 | 9.768 7511 | 481   | 0.212 1227 | 9.916 1297 | 124 | 50       |          |
| 2 66.6  | 20       | 20       | 9.704 4665 | 358 | 9.768 7991 | 481   | 0.212 990  | 9.916 8854 | 124 | 40       |          |
| 3 114.9 | 30       | 30       | 9.704 5023 | 358 | 9.768 8470 | 481   | 0.212 7521 | 9.916 8431 | 124 | 30       |          |
| 4 163.4 | 40       | 40       | 9.704 5382 | 358 | 9.768 8958 | 481   | 0.212 5142 | 9.916 8007 | 124 | 20       |          |
| 5 211.5 | 50       | 50       | 9.704 5740 | 359 | 9.768 9437 | 481   | 0.212 2768 | 9.916 7584 | 124 | 10       |          |
| 6 259.8 | 0        | 0        | 9.704 6099 | 358 | 9.768 9922 | 481   | 0.212 400  | 9.916 7161 | 124 | 0        | 34       |
| 7 308.1 | 10       | 10       | 9.704 6457 | 358 | 9.769 0404 | 481   | 0.212 1625 | 9.916 6737 | 124 | 50       |          |
| 8 356.4 | 20       | 20       | 9.704 6815 | 357 | 9.769 0886 | 481   | 0.212 9244 | 9.916 6314 | 124 | 40       |          |
| 9 404.7 | 30       | 30       | 9.704 7174 | 357 | 9.769 1368 | 481   | 0.212 6861 | 9.916 5891 | 124 | 30       |          |
| 183     | 40       | 40       | 9.704 7532 | 358 | 9.769 1850 | 481   | 0.212 4479 | 9.916 5468 | 124 | 20       |          |
| 1 18.1  | 50       | 50       | 9.704 7890 | 358 | 9.769 2332 | 481   | 0.212 2098 | 9.916 5045 | 124 | 10       |          |
| 2 66.6  | 0        | 0        | 9.704 8248 | 358 | 9.769 2814 | 481   | 0.212 9706 | 9.916 4621 | 124 | 0        | 33       |
| 3 114.9 | 10       | 10       | 9.704 8606 | 359 | 9.769 3296 | 481   | 0.212 7324 | 9.916 4198 | 124 | 50       |          |
| 4 163.4 | 20       | 20       | 9.704 8965 | 358 | 9.769 3778 | 481   | 0.212 4941 | 9.916 3774 | 124 | 40       |          |
| 5 211.5 | 30       | 30       | 9.704 9321 | 358 | 9.769 4260 | 481   | 0.212 2558 | 9.916 3351 | 124 | 30       |          |
| 6 259.8 | 40       | 40       | 9.704 9681 | 358 | 9.769 4742 | 481   | 0.212 100  | 9.916 2928 | 124 | 20       |          |
| 7 308.1 | 50       | 50       | 9.705 0039 | 358 | 9.769 5224 | 481   | 0.212 8618 | 9.916 2504 | 124 | 10       |          |
| 8 356.4 | 0        | 0        | 9.705 0397 | 357 | 9.769 5705 | 481   | 0.212 6245 | 9.916 2081 | 124 | 0        | 32       |
| 9 404.7 | 10       | 10       | 9.705 0754 | 358 | 9.769 6187 | 481   | 0.212 3871 | 9.916 1657 | 124 | 50       |          |
| 183     | 20       | 20       | 9.705 1112 | 358 | 9.769 6669 | 481   | 0.212 1497 | 9.916 1234 | 124 | 40       |          |
| 1 18.1  | 30       | 30       | 9.705 1470 | 358 | 9.769 7151 | 481   | 0.212 910  | 9.916 8811 | 124 | 30       |          |
| 2 66.6  | 40       | 40       | 9.705 1828 | 358 | 9.769 7632 | 481   | 0.212 6721 | 9.916 8388 | 124 | 20       |          |
| 3 114.9 | 50       | 50       | 9.705 2186 | 358 | 9.769 8114 | 481   | 0.212 4342 | 9.916 7965 | 124 | 10       |          |
| 4 163.4 | 0        | 0        | 9.705 2543 | 358 | 9.769 8596 | 481   | 0.212 1968 | 9.916 7541 | 124 | 0        | 31       |
| 5 211.5 | 10       | 10       | 9.705 2901 | 358 | 9.769 9077 | 481   | 0.212 958  | 9.916 7118 | 124 | 50       |          |
| 6 259.8 | 20       | 20       | 9.705 3259 | 357 | 9.769 9559 | 481   | 0.212 7206 | 9.916 6694 | 124 | 40       |          |
| 7 308.1 | 30       | 30       | 9.705 3616 | 357 | 9.769 0040 | 481   | 0.212 4824 | 9.916 6271 | 124 | 30       |          |
| 8 356.4 | 40       | 40       | 9.705 3974 | 357 | 9.769 0522 | 481   | 0.212 2441 | 9.916 5848 | 124 | 20       |          |
| 9 404.7 | 50       | 50       | 9.705 4331 | 358 | 9.769 1004 | 481   | 0.212 100  | 9.916 5424 | 124 | 10       |          |
| 183     | 0        | 0        | 9.705 4689 | 358 | 9.769 1485 | 481   | 0.212 8618 | 9.916 5001 | 124 | 0        | 30       |
| 1 18.1  |          |          |            |     |            |       |            |            |     |          |          |
| 2 66.6  |          |          |            |     |            |       |            |            |     |          |          |
| 3 114.9 |          |          |            |     |            |       |            |            |     |          |          |
| 4 163.4 |          |          |            |     |            |       |            |            |     |          |          |
| 5 211.5 |          |          |            |     |            |       |            |            |     |          |          |
| 6 259.8 |          |          |            |     |            |       |            |            |     |          |          |
| 7 308.1 |          |          |            |     |            |       |            |            |     |          |          |
| 8 356.4 |          |          |            |     |            |       |            |            |     |          |          |
| 9 404.7 |          |          |            |     |            |       |            |            |     |          |          |



|    | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d.  | "  |    |
|----|----|------------|-----|------------|-------|------------|------------|-----|----|----|
| 30 | 0  | 9.705 4689 | 357 | 9.770 1485 | 481   | 0.229 8515 | 9.935 3204 | 124 | 0  | 30 |
|    | 10 | 9.705 5046 | 358 | 9.770 1966 | 482   | 0.229 8034 | 9.935 3080 | 124 | 50 |    |
|    | 20 | 9.705 5404 | 357 | 9.770 2448 | 481   | 0.229 7552 | 9.935 2956 | 124 | 40 |    |
|    | 30 | 9.705 5761 | 357 | 9.770 2929 | 482   | 0.229 7071 | 9.935 2832 | 124 | 30 |    |
|    | 40 | 9.705 6118 | 357 | 9.770 3411 | 481   | 0.229 6589 | 9.935 2708 | 124 | 20 |    |
|    | 50 | 9.705 6475 | 358 | 9.770 3892 | 481   | 0.229 6108 | 9.935 2584 | 125 | 10 |    |
| 31 | 0  | 9.705 6833 | 357 | 9.770 4373 | 482   | 0.229 5627 | 9.935 2459 | 124 | 0  | 29 |
|    | 10 | 9.705 7190 | 357 | 9.770 4855 | 481   | 0.229 5145 | 9.935 2335 | 124 | 50 |    |
|    | 20 | 9.705 7547 | 357 | 9.770 5336 | 481   | 0.229 4664 | 9.935 2211 | 124 | 40 |    |
|    | 30 | 9.705 7904 | 357 | 9.770 5817 | 481   | 0.229 4183 | 9.935 2087 | 124 | 30 |    |
|    | 40 | 9.705 8261 | 357 | 9.770 6298 | 481   | 0.229 3702 | 9.935 1963 | 124 | 20 |    |
|    | 50 | 9.705 8618 | 357 | 9.770 6779 | 482   | 0.229 3221 | 9.935 1839 | 124 | 10 |    |
| 32 | 0  | 9.705 8975 | 357 | 9.770 7261 | 481   | 0.229 2739 | 9.935 1715 | 125 | 0  | 28 |
|    | 10 | 9.705 9332 | 357 | 9.770 7742 | 481   | 0.229 2258 | 9.935 1590 | 124 | 50 |    |
|    | 20 | 9.705 9689 | 357 | 9.770 8223 | 481   | 0.229 1777 | 9.935 1466 | 124 | 40 |    |
|    | 30 | 9.706 0046 | 357 | 9.770 8704 | 481   | 0.229 1296 | 9.935 1342 | 124 | 30 |    |
|    | 40 | 9.706 0403 | 357 | 9.770 9185 | 481   | 0.229 0815 | 9.935 1218 | 125 | 20 |    |
|    | 50 | 9.706 0760 | 356 | 9.770 9666 | 481   | 0.229 0334 | 9.935 1093 | 124 | 10 |    |
| 33 | 0  | 9.706 1116 | 357 | 9.771 0147 | 481   | 0.228 9853 | 9.935 0969 | 124 | 0  | 27 |
|    | 10 | 9.706 1473 | 357 | 9.771 0628 | 481   | 0.228 9372 | 9.935 0845 | 124 | 50 |    |
|    | 20 | 9.706 1830 | 357 | 9.771 1109 | 481   | 0.228 8891 | 9.935 0721 | 124 | 40 |    |
|    | 30 | 9.706 2186 | 356 | 9.771 1590 | 481   | 0.228 8410 | 9.935 0596 | 125 | 30 |    |
|    | 40 | 9.706 2543 | 357 | 9.771 2071 | 481   | 0.228 7929 | 9.935 0472 | 124 | 20 |    |
|    | 50 | 9.706 2900 | 356 | 9.771 2552 | 481   | 0.228 7448 | 9.935 0348 | 125 | 10 |    |
| 34 | 0  | 9.706 3256 | 357 | 9.771 3033 | 481   | 0.228 6967 | 9.935 0223 | 124 | 0  | 26 |
|    | 10 | 9.706 3613 | 356 | 9.771 3514 | 480   | 0.228 6486 | 9.935 0099 | 124 | 50 |    |
|    | 20 | 9.706 3969 | 356 | 9.771 3994 | 481   | 0.228 6006 | 9.934 9975 | 125 | 40 |    |
|    | 30 | 9.706 4325 | 357 | 9.771 4475 | 481   | 0.228 5525 | 9.934 9850 | 125 | 30 |    |
|    | 40 | 9.706 4682 | 356 | 9.771 4956 | 481   | 0.228 5044 | 9.934 9726 | 125 | 20 |    |
|    | 50 | 9.706 5038 | 356 | 9.771 5437 | 480   | 0.228 4563 | 9.934 9601 | 124 | 10 |    |
| 35 | 0  | 9.706 5394 | 357 | 9.771 5917 | 481   | 0.228 4083 | 9.934 9477 | 124 | 0  | 25 |
|    | 10 | 9.706 5751 | 356 | 9.771 6398 | 481   | 0.228 3602 | 9.934 9353 | 125 | 50 |    |
|    | 20 | 9.706 6107 | 356 | 9.771 6879 | 480   | 0.228 3121 | 9.934 9228 | 124 | 40 |    |
|    | 30 | 9.706 6463 | 356 | 9.771 7359 | 481   | 0.228 2641 | 9.934 9104 | 125 | 30 |    |
|    | 40 | 9.706 6819 | 356 | 9.771 7840 | 481   | 0.228 2160 | 9.934 8979 | 124 | 20 |    |
|    | 50 | 9.706 7175 | 356 | 9.771 8321 | 480   | 0.228 1679 | 9.934 8855 | 125 | 10 |    |
| 36 | 0  | 9.706 7531 | 356 | 9.771 8801 | 481   | 0.228 1199 | 9.934 8730 | 124 | 0  | 24 |
|    | 10 | 9.706 7887 | 356 | 9.771 9282 | 480   | 0.228 0718 | 9.934 8606 | 125 | 50 |    |
|    | 20 | 9.706 8243 | 356 | 9.771 9762 | 481   | 0.228 0238 | 9.934 8481 | 125 | 40 |    |
|    | 30 | 9.706 8599 | 356 | 9.772 0243 | 480   | 0.227 9757 | 9.934 8356 | 124 | 30 |    |
|    | 40 | 9.706 8955 | 356 | 9.772 0723 | 480   | 0.227 9277 | 9.934 8232 | 125 | 20 |    |
|    | 50 | 9.706 9311 | 356 | 9.772 1203 | 481   | 0.227 8797 | 9.934 8107 | 124 | 10 |    |
| 37 | 0  | 9.706 9667 | 355 | 9.772 1684 | 480   | 0.227 8316 | 9.934 7983 | 125 | 0  | 23 |
|    | 10 | 9.707 0022 | 356 | 9.772 2164 | 481   | 0.227 7836 | 9.934 7858 | 125 | 50 |    |
|    | 20 | 9.707 0378 | 356 | 9.772 2645 | 480   | 0.227 7355 | 9.934 7733 | 124 | 40 |    |
|    | 30 | 9.707 0734 | 355 | 9.772 3125 | 480   | 0.227 6875 | 9.934 7609 | 125 | 30 |    |
|    | 40 | 9.707 1089 | 356 | 9.772 3605 | 481   | 0.227 6395 | 9.934 7484 | 124 | 20 |    |
|    | 50 | 9.707 1445 | 356 | 9.772 4086 | 480   | 0.227 5914 | 9.934 7360 | 125 | 10 |    |
| 38 | 0  | 9.707 1801 | 355 | 9.772 4566 | 480   | 0.227 5434 | 9.934 7235 | 125 | 0  | 22 |
|    | 10 | 9.707 2156 | 356 | 9.772 5046 | 480   | 0.227 4954 | 9.934 7110 | 125 | 50 |    |
|    | 20 | 9.707 2512 | 355 | 9.772 5526 | 480   | 0.227 4474 | 9.934 6985 | 124 | 40 |    |
|    | 30 | 9.707 2867 | 355 | 9.772 6006 | 481   | 0.227 3994 | 9.934 6861 | 125 | 30 |    |
|    | 40 | 9.707 3223 | 355 | 9.772 6487 | 480   | 0.227 3513 | 9.934 6736 | 125 | 20 |    |
|    | 50 | 9.707 3578 | 355 | 9.772 6967 | 480   | 0.227 3033 | 9.934 6611 | 125 | 10 |    |
| 39 | 0  | 9.707 3933 | 356 | 9.772 7447 | 480   | 0.227 2553 | 9.934 6486 | 124 | 0  | 21 |
|    | 10 | 9.707 4289 | 355 | 9.772 7927 | 480   | 0.227 2073 | 9.934 6362 | 125 | 50 |    |
|    | 20 | 9.707 4644 | 355 | 9.772 8407 | 480   | 0.227 1593 | 9.934 6237 | 125 | 40 |    |
|    | 30 | 9.707 4999 | 355 | 9.772 8887 | 480   | 0.227 1113 | 9.934 6112 | 125 | 30 |    |
|    | 40 | 9.707 5354 | 355 | 9.772 9367 | 480   | 0.227 0633 | 9.934 5987 | 125 | 20 |    |
|    | 50 | 9.707 5709 | 355 | 9.772 9847 | 480   | 0.227 0153 | 9.934 5862 | 124 | 10 |    |
| 40 | 0  | 9.707 6064 | 355 | 9.773 0327 |       | 0.226 9673 | 9.934 5738 |     | 0  | 20 |



480

1 48.0  
2 96.0  
3 144.0  
4 192.0  
5 240.0  
6 288.0  
7 336.0  
8 384.0  
9 432.0

470

1 47.9  
2 95.8  
3 143.7  
4 191.6  
5 239.5  
6 287.4  
7 335.3  
8 383.2  
9 431.1

355

1 35.5  
2 71.0  
3 106.5  
4 142.0  
5 177.5  
6 213.0  
7 248.5  
8 284.0  
9 319.5

354

1 35.4  
2 70.8  
3 106.2  
4 141.6  
5 177.0  
6 212.4  
7 247.8  
8 283.2  
9 318.6

125

1 12.5  
2 25.0  
3 37.5  
4 50.0  
5 62.5  
6 75.0  
7 87.5  
8 100.0  
9 112.5

126

1 12.6  
2 25.2  
3 37.8  
4 50.4  
5 63.0  
6 75.6  
7 88.2  
8 100.8  
9 113.4

|    | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d.  | "  |
|----|----|------------|-----|------------|-------|------------|------------|-----|----|
| 40 | o  | 9.707 6064 | 355 | 9.773 0327 | 480   | 0.226 9673 | 9.934 5738 | 125 | o  |
|    | 10 | 9.707 6419 | 356 | 9.773 0807 | 480   | 0.226 9193 | 9.934 5613 | 125 | 50 |
|    | 20 | 9.707 6775 | 355 | 9.773 1287 | 479   | 0.226 8713 | 9.934 5488 | 125 | 40 |
|    | 30 | 9.707 7129 | 354 | 9.773 1766 | 480   | 0.226 8234 | 9.934 5363 | 125 | 30 |
|    | 40 | 9.707 7484 | 355 | 9.773 2246 | 480   | 0.226 7754 | 9.934 5238 | 125 | 20 |
|    | 50 | 9.707 7839 | 355 | 9.773 2726 | 480   | 0.226 7274 | 9.934 5113 | 125 | 10 |
| 41 | o  | 9.707 8194 | 355 | 9.773 3206 | 480   | 0.226 6794 | 9.934 4988 | 125 | o  |
|    | 10 | 9.707 8549 | 355 | 9.773 3686 | 479   | 0.226 6314 | 9.934 4863 | 125 | 50 |
|    | 20 | 9.707 8904 | 355 | 9.773 4165 | 480   | 0.226 5835 | 9.934 4738 | 125 | 40 |
|    | 30 | 9.707 9259 | 354 | 9.773 4645 | 480   | 0.226 5355 | 9.934 4613 | 125 | 30 |
|    | 40 | 9.707 9613 | 354 | 9.773 5125 | 479   | 0.226 4875 | 9.934 4488 | 125 | 20 |
|    | 50 | 9.707 9968 | 355 | 9.773 5604 | 480   | 0.226 4396 | 9.934 4363 | 125 | 10 |
| 42 | o  | 9.708 0323 | 354 | 9.773 6084 | 480   | 0.226 3916 | 9.934 4238 | 125 | o  |
|    | 10 | 9.708 0677 | 355 | 9.773 6564 | 479   | 0.226 3436 | 9.934 4113 | 125 | 50 |
|    | 20 | 9.708 1032 | 355 | 9.773 7043 | 480   | 0.226 2957 | 9.934 3988 | 125 | 40 |
|    | 30 | 9.708 1386 | 354 | 9.773 7523 | 479   | 0.226 2477 | 9.934 3863 | 125 | 30 |
|    | 40 | 9.708 1741 | 354 | 9.773 8002 | 480   | 0.226 1998 | 9.934 3738 | 125 | 20 |
|    | 50 | 9.708 2095 | 355 | 9.773 8482 | 479   | 0.226 1518 | 9.934 3613 | 125 | 10 |
| 43 | o  | 9.708 2450 | 354 | 9.773 8961 | 480   | 0.226 1039 | 9.934 3488 | 125 | o  |
|    | 10 | 9.708 2804 | 354 | 9.773 9441 | 479   | 0.226 0559 | 9.934 3363 | 125 | 50 |
|    | 20 | 9.708 3158 | 354 | 9.773 9920 | 480   | 0.226 0080 | 9.934 3238 | 125 | 40 |
|    | 30 | 9.708 3512 | 355 | 9.774 0400 | 480   | 0.225 9600 | 9.934 3113 | 125 | 30 |
|    | 40 | 9.708 3867 | 354 | 9.774 0879 | 479   | 0.225 9121 | 9.934 2988 | 125 | 20 |
|    | 50 | 9.708 4221 | 354 | 9.774 1358 | 480   | 0.225 8642 | 9.934 2863 | 125 | 10 |
| 44 | o  | 9.708 4575 | 354 | 9.774 1838 | 479   | 0.225 8162 | 9.934 2737 | 125 | o  |
|    | 10 | 9.708 4929 | 354 | 9.774 2317 | 479   | 0.225 7683 | 9.934 2612 | 125 | 50 |
|    | 20 | 9.708 5283 | 354 | 9.774 2796 | 480   | 0.225 7204 | 9.934 2487 | 125 | 40 |
|    | 30 | 9.708 5637 | 354 | 9.774 3276 | 479   | 0.225 6724 | 9.934 2362 | 125 | 30 |
|    | 40 | 9.708 5991 | 354 | 9.774 3755 | 479   | 0.225 6245 | 9.934 2237 | 125 | 20 |
|    | 50 | 9.708 6345 | 354 | 9.774 4234 | 479   | 0.225 5766 | 9.934 2111 | 125 | 10 |
| 45 | o  | 9.708 6699 | 354 | 9.774 4713 | 479   | 0.225 5287 | 9.934 1986 | 125 | o  |
|    | 10 | 9.708 7053 | 354 | 9.774 5192 | 480   | 0.225 4808 | 9.934 1861 | 126 | 50 |
|    | 20 | 9.708 7407 | 354 | 9.774 5672 | 479   | 0.225 4328 | 9.934 1735 | 125 | 40 |
|    | 30 | 9.708 7761 | 354 | 9.774 6151 | 479   | 0.225 3849 | 9.934 1610 | 125 | 30 |
|    | 40 | 9.708 8115 | 354 | 9.774 6630 | 479   | 0.225 3370 | 9.934 1485 | 126 | 20 |
|    | 50 | 9.708 8468 | 354 | 9.774 7109 | 479   | 0.225 2891 | 9.934 1359 | 125 | 10 |
| 46 | o  | 9.708 8822 | 354 | 9.774 7588 | 479   | 0.225 2412 | 9.934 1234 | 125 | o  |
|    | 10 | 9.708 9176 | 353 | 9.774 8067 | 479   | 0.225 1933 | 9.934 1109 | 126 | 50 |
|    | 20 | 9.708 9529 | 354 | 9.774 8546 | 479   | 0.225 1454 | 9.934 0983 | 125 | 40 |
|    | 30 | 9.708 9883 | 353 | 9.774 9025 | 479   | 0.225 0975 | 9.934 0858 | 125 | 30 |
|    | 40 | 9.709 0236 | 354 | 9.774 9504 | 479   | 0.225 0496 | 9.934 0733 | 126 | 20 |
|    | 50 | 9.709 0590 | 353 | 9.774 9983 | 479   | 0.225 0017 | 9.934 0607 | 125 | 10 |
| 47 | o  | 9.709 0943 | 354 | 9.775 0462 | 478   | 0.224 9538 | 9.934 0482 | 126 | o  |
|    | 10 | 9.709 1297 | 353 | 9.775 0940 | 479   | 0.224 9060 | 9.934 0356 | 125 | 50 |
|    | 20 | 9.709 1650 | 353 | 9.775 1419 | 479   | 0.224 8581 | 9.934 0231 | 126 | 40 |
|    | 30 | 9.709 2003 | 354 | 9.775 1898 | 479   | 0.224 8102 | 9.934 0105 | 125 | 30 |
|    | 40 | 9.709 2357 | 353 | 9.775 2377 | 479   | 0.224 7623 | 9.933 9980 | 126 | 20 |
|    | 50 | 9.709 2710 | 353 | 9.775 2856 | 478   | 0.224 7144 | 9.933 9854 | 125 | 10 |
| 48 | o  | 9.709 3063 | 353 | 9.775 3334 | 479   | 0.224 6666 | 9.933 9729 | 126 | o  |
|    | 10 | 9.709 3416 | 354 | 9.775 3813 | 479   | 0.224 6187 | 9.933 9603 | 125 | 50 |
|    | 20 | 9.709 3770 | 353 | 9.775 4292 | 478   | 0.224 5708 | 9.933 9478 | 126 | 40 |
|    | 30 | 9.709 4123 | 353 | 9.775 4770 | 479   | 0.224 5230 | 9.933 9352 | 125 | 30 |
|    | 40 | 9.709 4476 | 353 | 9.775 5249 | 479   | 0.224 4751 | 9.933 9227 | 126 | 20 |
|    | 50 | 9.709 4829 | 353 | 9.775 5728 | 478   | 0.224 4272 | 9.933 9101 | 125 | 10 |
| 49 | o  | 9.709 5182 | 353 | 9.775 6206 | 479   | 0.224 3794 | 9.933 8976 | 126 | o  |
|    | 10 | 9.709 5535 | 353 | 9.775 6685 | 478   | 0.224 3315 | 9.933 8850 | 126 | 50 |
|    | 20 | 9.709 5888 | 352 | 9.775 7163 | 479   | 0.224 2837 | 9.933 8724 | 125 | 40 |
|    | 30 | 9.709 6240 | 353 | 9.775 7642 | 478   | 0.224 2358 | 9.933 8599 | 126 | 30 |
|    | 40 | 9.709 6593 | 353 | 9.775 8120 | 479   | 0.224 1880 | 9.933 8473 | 126 | 20 |
|    | 50 | 9.709 6946 | 353 | 9.775 8599 | 478   | 0.224 1401 | 9.933 8347 | 125 | 10 |
| 50 | o  | 9.709 7299 | 353 | 9.775 9077 |       | 0.224 0923 | 9.933 8222 |     | o  |
|    |    |            |     |            |       |            |            |     |    |
|    | "  | Cos        | d.  | Cotg       | d. c. | Tang       | Shi        | d.  | "  |



|    | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d.  | "  |    |
|----|----|------------|-----|------------|-------|------------|------------|-----|----|----|
| 50 | o  | 9.709 7299 | 353 | 9.775 9077 | 479   | 0.224 0923 | 9.933 8222 | 126 | o  | 10 |
|    | 10 | 9.709 7652 | 352 | 9.775 9556 | 478   | 0.224 0444 | 9.933 8096 | 126 | 50 |    |
|    | 20 | 9.709 8004 | 352 | 9.776 0034 | 478   | 0.223 9966 | 9.933 7970 | 125 | 40 |    |
|    | 30 | 9.709 8357 | 353 | 9.776 0512 | 479   | 0.223 9488 | 9.933 7845 | 126 | 30 |    |
|    | 40 | 9.709 8709 | 352 | 9.776 0991 | 478   | 0.223 9009 | 9.933 7719 | 126 | 20 |    |
|    | 50 | 9.709 9062 | 353 | 9.776 1469 | 478   | 0.223 8531 | 9.933 7593 | 126 | 10 |    |
| 51 | o  | 9.709 9415 | 352 | 9.776 1947 | 478   | 0.223 8053 | 9.933 7467 | 125 | o  | 9  |
|    | 10 | 9.709 9767 | 352 | 9.776 2425 | 479   | 0.223 7575 | 9.933 7342 | 126 | 50 |    |
|    | 20 | 9.710 0119 | 352 | 9.776 2904 | 478   | 0.223 7096 | 9.933 7216 | 126 | 40 |    |
|    | 30 | 9.710 0472 | 353 | 9.776 3382 | 478   | 0.223 6618 | 9.933 7090 | 126 | 30 |    |
|    | 40 | 9.710 0824 | 352 | 9.776 3860 | 478   | 0.223 6140 | 9.933 6964 | 126 | 20 |    |
|    | 50 | 9.710 1177 | 353 | 9.776 4338 | 478   | 0.223 5662 | 9.933 6838 | 126 | 10 |    |
| 52 | o  | 9.710 1529 | 352 | 9.776 4816 | 478   | 0.223 5184 | 9.933 6713 | 126 | o  | 8  |
|    | 10 | 9.710 1881 | 352 | 9.776 5294 | 479   | 0.223 4706 | 9.933 6587 | 126 | 50 |    |
|    | 20 | 9.710 2233 | 351 | 9.776 5773 | 478   | 0.223 4227 | 9.933 6461 | 126 | 40 |    |
|    | 30 | 9.710 2586 | 353 | 9.776 6251 | 478   | 0.223 3749 | 9.933 6335 | 126 | 30 |    |
|    | 40 | 9.710 2938 | 352 | 9.776 6729 | 478   | 0.223 3271 | 9.933 6209 | 126 | 20 |    |
|    | 50 | 9.710 3290 | 352 | 9.776 7207 | 478   | 0.223 2793 | 9.933 6083 | 126 | 10 |    |
| 53 | o  | 9.710 3642 | 352 | 9.776 7685 | 478   | 0.223 2315 | 9.933 5957 | 126 | o  | 7  |
|    | 10 | 9.710 3994 | 352 | 9.776 8163 | 477   | 0.223 1837 | 9.933 5831 | 126 | 50 |    |
|    | 20 | 9.710 4346 | 352 | 9.776 8640 | 478   | 0.223 1360 | 9.933 5705 | 126 | 40 |    |
|    | 30 | 9.710 4698 | 352 | 9.776 9118 | 478   | 0.223 0882 | 9.933 5579 | 126 | 30 |    |
|    | 40 | 9.710 5050 | 352 | 9.776 9596 | 478   | 0.223 0404 | 9.933 5453 | 126 | 20 |    |
|    | 50 | 9.710 5402 | 351 | 9.777 0074 | 478   | 0.222 9926 | 9.933 5327 | 126 | 10 |    |
| 54 | o  | 9.710 5753 | 352 | 9.777 0552 | 478   | 0.222 9448 | 9.933 5201 | 126 | o  | 6  |
|    | 10 | 9.710 6105 | 352 | 9.777 1030 | 478   | 0.222 8970 | 9.933 5075 | 126 | 50 |    |
|    | 20 | 9.710 6457 | 352 | 9.777 1508 | 477   | 0.222 8492 | 9.933 4949 | 126 | 40 |    |
|    | 30 | 9.710 6809 | 351 | 9.777 1985 | 478   | 0.222 8015 | 9.933 4823 | 126 | 30 |    |
|    | 40 | 9.710 7160 | 352 | 9.777 2463 | 478   | 0.222 7537 | 9.933 4697 | 126 | 20 |    |
|    | 50 | 9.710 7512 | 351 | 9.777 2941 | 477   | 0.222 7059 | 9.933 4571 | 126 | 10 |    |
| 55 | o  | 9.710 7863 | 352 | 9.777 3418 | 478   | 0.222 6582 | 9.933 4445 | 126 | o  | 5  |
|    | 10 | 9.710 8215 | 352 | 9.777 3896 | 478   | 0.222 6104 | 9.933 4319 | 126 | 50 |    |
|    | 20 | 9.710 8567 | 351 | 9.777 4374 | 477   | 0.222 5626 | 9.933 4193 | 126 | 40 |    |
|    | 30 | 9.710 8918 | 351 | 9.777 4851 | 478   | 0.222 5149 | 9.933 4067 | 126 | 30 |    |
|    | 40 | 9.710 9269 | 352 | 9.777 5329 | 477   | 0.222 4671 | 9.933 3941 | 127 | 20 |    |
|    | 50 | 9.710 9621 | 351 | 9.777 5806 | 478   | 0.222 4194 | 9.933 3814 | 126 | 10 |    |
| 56 | o  | 9.710 9972 | 352 | 9.777 6284 | 478   | 0.222 3716 | 9.933 3688 | 126 | o  | 4  |
|    | 10 | 9.711 0324 | 351 | 9.777 6762 | 477   | 0.222 3238 | 9.933 3562 | 126 | 50 |    |
|    | 20 | 9.711 0675 | 351 | 9.777 7239 | 477   | 0.222 2761 | 9.933 3436 | 126 | 40 |    |
|    | 30 | 9.711 1026 | 351 | 9.777 7716 | 478   | 0.222 2284 | 9.933 3310 | 127 | 30 |    |
|    | 40 | 9.711 1377 | 351 | 9.777 8194 | 477   | 0.222 1806 | 9.933 3183 | 126 | 20 |    |
|    | 50 | 9.711 1728 | 352 | 9.777 8671 | 478   | 0.222 1329 | 9.933 3057 | 126 | 10 |    |
| 57 | o  | 9.711 2080 | 351 | 9.777 9149 | 477   | 0.222 0851 | 9.933 2931 | 126 | o  | 3  |
|    | 10 | 9.711 2431 | 351 | 9.777 9626 | 477   | 0.222 0374 | 9.933 2805 | 127 | 50 |    |
|    | 20 | 9.711 2782 | 351 | 9.778 0103 | 478   | 0.221 9897 | 9.933 2678 | 126 | 40 |    |
|    | 30 | 9.711 3133 | 351 | 9.778 0580 | 477   | 0.221 9419 | 9.933 2552 | 126 | 30 |    |
|    | 40 | 9.711 3484 | 351 | 9.778 1058 | 477   | 0.221 8942 | 9.933 2426 | 127 | 20 |    |
|    | 50 | 9.711 3835 | 351 | 9.778 1535 | 477   | 0.221 8465 | 9.933 2299 | 126 | 10 |    |
| 58 | o  | 9.711 4186 | 350 | 9.778 2012 | 478   | 0.221 7988 | 9.933 2173 | 126 | o  | 2  |
|    | 10 | 9.711 4536 | 351 | 9.778 2490 | 477   | 0.221 7510 | 9.933 2047 | 127 | 50 |    |
|    | 20 | 9.711 4887 | 351 | 9.778 2967 | 477   | 0.221 7033 | 9.933 1920 | 126 | 40 |    |
|    | 30 | 9.711 5238 | 351 | 9.778 3444 | 477   | 0.221 6556 | 9.933 1794 | 126 | 30 |    |
|    | 40 | 9.711 5589 | 350 | 9.778 3921 | 477   | 0.221 6079 | 9.933 1668 | 127 | 20 |    |
|    | 50 | 9.711 5939 | 351 | 9.778 4398 | 477   | 0.221 5602 | 9.933 1541 | 126 | 10 |    |
| 59 | o  | 9.711 6290 | 351 | 9.778 4875 | 477   | 0.221 5125 | 9.933 1415 | 127 | o  | 1  |
|    | 10 | 9.711 6641 | 350 | 9.778 5352 | 477   | 0.221 4648 | 9.933 1288 | 126 | 50 |    |
|    | 20 | 9.711 6991 | 351 | 9.778 5829 | 478   | 0.221 4171 | 9.933 1162 | 127 | 40 |    |
|    | 30 | 9.711 7342 | 350 | 9.778 6307 | 477   | 0.221 3693 | 9.933 1035 | 126 | 30 |    |
|    | 40 | 9.711 7692 | 351 | 9.778 6784 | 476   | 0.221 3216 | 9.933 0909 | 127 | 20 |    |
|    | 50 | 9.711 8043 | 350 | 9.778 7260 | 477   | 0.221 2740 | 9.933 0782 | 126 | 10 |    |
| 60 | o  | 9.711 8393 | 350 | 9.778 7737 | 477   | 0.221 2263 | 9.933 0656 | 126 | o  | 0  |
|    |    |            |     |            |       |            |            |     |    |    |
|    | "  | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d.  | "  |    |

478  
 1 47.8  
 2 95.6  
 3 143.4  
 4 191.2  
 5 239.0  
 6 286.8  
 7 334.6  
 8 382.4  
 9 430.1  
  
 477  
 1 47.7  
 2 95.4  
 3 143.1  
 4 190.8  
 5 238.5  
 6 286.2  
 7 333.9  
 8 381.6  
 9 429.1  
  
 353  
 1 35.3  
 2 70.6  
 3 105.9  
 4 141.2  
 5 176.5  
 6 211.8  
 7 247.1  
 8 282.4  
 9 317.7  
  
 352  
 1 35.1  
 2 70.4  
 3 105.6  
 4 140.8  
 5 176.0  
 6 211.2  
 7 246.4  
 8 281.6  
 9 316.8  
  
 351  
 1 35.1  
 2 70.1  
 3 105.3  
 4 140.4  
 5 175.5  
 6 210.6  
 7 245.7  
 8 280.8  
 9 315.9  
  
 127  
 1 12.7  
 2 25.4  
 3 38.1  
 4 50.8  
 5 63.5  
 6 76.2  
 7 88.9  
 8 101.6  
 9 114.3



|         | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d.  | "  |    |
|---------|----|------------|-----|------------|-------|------------|------------|-----|----|----|
| 477     | 0  | 9.711 8393 | 351 | 9.778 7737 | 477   | 0.221 2263 | 9.933 0656 | 127 | 0  | 60 |
| 1 47.7  | 10 | 9.711 8744 | 350 | 9.778 8214 | 477   | 0.221 1786 | 9.933 0529 | 126 | 50 |    |
| 2 95.4  | 20 | 9.711 9094 | 350 | 9.778 8691 | 477   | 0.221 1309 | 9.933 0403 | 127 | 40 |    |
| 3 143.1 | 30 | 9.711 9444 | 351 | 9.778 9168 | 477   | 0.221 0832 | 9.933 0276 | 126 | 30 |    |
| 4 190.8 | 40 | 9.711 9795 | 350 | 9.778 9645 | 477   | 0.221 0355 | 9.933 0150 | 127 | 20 |    |
| 5 238.5 | 50 | 9.712 0145 | 350 | 9.779 0122 | 477   | 0.220 9878 | 9.933 0023 | 126 | 10 |    |
| 6 286.2 | 1  | 9.712 0495 | 350 | 9.779 0599 | 476   | 0.220 9401 | 9.932 9897 | 127 | 0  | 59 |
| 7 333.9 | 10 | 9.712 0845 | 350 | 9.779 1075 | 477   | 0.220 8925 | 9.932 9770 | 127 | 50 |    |
| 8 381.6 | 20 | 9.712 1195 | 351 | 9.779 1552 | 477   | 0.220 8448 | 9.932 9643 | 126 | 40 |    |
| 9 429.3 | 30 | 9.712 1546 | 350 | 9.779 2029 | 476   | 0.220 7971 | 9.932 9517 | 127 | 30 |    |
|         | 40 | 9.712 1896 | 350 | 9.779 2505 | 477   | 0.220 7495 | 9.932 9390 | 127 | 20 |    |
|         | 50 | 9.712 2246 | 350 | 9.779 2982 | 477   | 0.220 7018 | 9.932 9263 | 126 | 10 |    |
| 476     | 2  | 9.712 2596 | 350 | 9.779 3459 | 476   | 0.220 6541 | 9.932 9137 | 127 | 0  | 58 |
| 1 47.6  | 10 | 9.712 2946 | 349 | 9.779 3935 | 477   | 0.220 6065 | 9.932 9010 | 127 | 50 |    |
| 2 95.2  | 20 | 9.712 3295 | 350 | 9.779 4412 | 477   | 0.220 5588 | 9.932 8883 | 126 | 40 |    |
| 3 142.8 | 30 | 9.712 3645 | 350 | 9.779 4889 | 476   | 0.220 5111 | 9.932 8757 | 127 | 30 |    |
| 4 190.4 | 40 | 9.712 3995 | 350 | 9.779 5365 | 477   | 0.220 4635 | 9.932 8630 | 127 | 20 |    |
| 5 238.0 | 50 | 9.712 4345 | 350 | 9.779 5842 | 476   | 0.220 4158 | 9.932 8503 | 127 | 10 |    |
| 6 285.6 | 3  | 9.712 4695 | 349 | 9.779 6318 | 477   | 0.220 3682 | 9.932 8376 | 126 | 0  | 57 |
| 7 333.2 | 10 | 9.712 5044 | 350 | 9.779 6795 | 476   | 0.220 3205 | 9.932 8250 | 127 | 50 |    |
| 8 380.8 | 20 | 9.712 5394 | 350 | 9.779 7271 | 477   | 0.220 2729 | 9.932 8123 | 127 | 40 |    |
| 9 428.4 | 30 | 9.712 5744 | 349 | 9.779 7748 | 476   | 0.220 2252 | 9.932 7996 | 127 | 30 |    |
|         | 40 | 9.712 6093 | 350 | 9.779 8224 | 476   | 0.220 1776 | 9.932 7869 | 127 | 20 |    |
| 350     | 50 | 9.712 6443 | 349 | 9.779 8700 | 477   | 0.220 1300 | 9.932 7742 | 126 | 10 |    |
| 1 35.0  | 4  | 9.712 6792 | 350 | 9.779 9177 | 476   | 0.220 0823 | 9.932 7616 | 127 | 0  | 56 |
| 2 70.0  | 10 | 9.712 7142 | 349 | 9.779 9653 | 476   | 0.220 0347 | 9.932 7489 | 127 | 50 |    |
| 3 105.0 | 20 | 9.712 7491 | 350 | 9.780 0129 | 477   | 0.219 9871 | 9.932 7362 | 127 | 40 |    |
| 4 140.0 | 30 | 9.712 7841 | 349 | 9.780 0606 | 476   | 0.219 9394 | 9.932 7235 | 127 | 30 |    |
| 5 175.0 | 40 | 9.712 8190 | 349 | 9.780 1082 | 476   | 0.219 8918 | 9.932 7108 | 127 | 20 |    |
| 6 210.0 | 50 | 9.712 8539 | 350 | 9.780 1558 | 476   | 0.219 8442 | 9.932 6981 | 127 | 10 |    |
| 7 245.0 | 5  | 9.712 8889 | 349 | 9.780 2034 | 476   | 0.219 7966 | 9.932 6854 | 127 | 0  | 55 |
| 8 280.0 | 10 | 9.712 9238 | 349 | 9.780 2510 | 477   | 0.219 7490 | 9.932 6727 | 127 | 50 |    |
| 9 315.0 | 20 | 9.712 9587 | 349 | 9.780 2987 | 476   | 0.219 7013 | 9.932 6600 | 127 | 40 |    |
|         | 30 | 9.712 9936 | 349 | 9.780 3463 | 476   | 0.219 6537 | 9.932 6473 | 127 | 30 |    |
| 349     | 40 | 9.713 0285 | 349 | 9.780 3939 | 476   | 0.219 6061 | 9.932 6346 | 126 | 20 |    |
| 1 34.9  | 50 | 9.713 0634 | 349 | 9.780 4415 | 476   | 0.219 5585 | 9.932 6220 | 128 | 10 |    |
| 2 69.8  | 6  | 9.713 0983 | 350 | 9.780 4891 | 476   | 0.219 5109 | 9.932 6092 | 127 | 0  | 54 |
| 3 104.7 | 10 | 9.713 1333 | 348 | 9.780 5367 | 476   | 0.219 4633 | 9.932 5965 | 127 | 50 |    |
| 4 139.6 | 20 | 9.713 1681 | 349 | 9.780 5843 | 476   | 0.219 4157 | 9.932 5838 | 127 | 40 |    |
| 5 174.5 | 30 | 9.713 2030 | 349 | 9.780 6319 | 476   | 0.219 3681 | 9.932 5711 | 127 | 30 |    |
| 6 209.4 | 40 | 9.713 2379 | 349 | 9.780 6795 | 476   | 0.219 3205 | 9.932 5584 | 127 | 20 |    |
| 7 244.3 | 50 | 9.713 2728 | 349 | 9.780 7271 | 476   | 0.219 2729 | 9.932 5457 | 127 | 10 |    |
| 8 279.2 | 7  | 9.713 3077 | 349 | 9.780 7747 | 476   | 0.219 2253 | 9.932 5330 | 127 | 0  | 53 |
| 9 314.1 | 10 | 9.713 3426 | 349 | 9.780 8223 | 476   | 0.219 1777 | 9.932 5203 | 127 | 50 |    |
|         | 20 | 9.713 3775 | 348 | 9.780 8699 | 475   | 0.219 1301 | 9.932 5076 | 127 | 40 |    |
| 126     | 30 | 9.713 4123 | 349 | 9.780 9174 | 476   | 0.219 0826 | 9.932 4949 | 127 | 30 |    |
| 1 12.6  | 40 | 9.713 4472 | 349 | 9.780 9650 | 476   | 0.219 0350 | 9.932 4822 | 127 | 20 |    |
| 2 25.2  | 50 | 9.713 4821 | 348 | 9.781 0126 | 476   | 0.218 9874 | 9.932 4695 | 128 | 10 |    |
| 3 37.8  | 8  | 9.713 5169 | 349 | 9.781 0602 | 476   | 0.218 9398 | 9.932 4567 | 127 | 0  | 52 |
| 4 50.4  | 10 | 9.713 5518 | 348 | 9.781 1078 | 475   | 0.218 8922 | 9.932 4440 | 127 | 50 |    |
| 5 63.0  | 20 | 9.713 5866 | 349 | 9.781 1553 | 476   | 0.218 8447 | 9.932 4313 | 127 | 40 |    |
| 6 75.6  | 30 | 9.713 6215 | 348 | 9.781 2029 | 476   | 0.218 7971 | 9.932 4186 | 127 | 30 |    |
| 7 88.2  | 40 | 9.713 6563 | 348 | 9.781 2505 | 475   | 0.218 7495 | 9.932 4059 | 127 | 20 |    |
| 8 100.8 | 50 | 9.713 6912 | 349 | 9.781 2980 | 475   | 0.218 7020 | 9.932 3931 | 127 | 10 |    |
| 9 113.4 | 9  | 9.713 7260 | 348 | 9.781 3456 | 476   | 0.218 6544 | 9.932 3804 | 127 | 0  | 51 |
|         | 10 | 9.713 7608 | 349 | 9.781 3932 | 475   | 0.218 6068 | 9.932 3677 | 128 | 50 |    |
| 127     | 20 | 9.713 7957 | 348 | 9.781 4407 | 476   | 0.218 5593 | 9.932 3550 | 127 | 40 |    |
| 1 12.7  | 30 | 9.713 8305 | 348 | 9.781 4883 | 475   | 0.218 5117 | 9.932 3422 | 127 | 30 |    |
| 2 25.4  | 40 | 9.713 8653 | 348 | 9.781 5358 | 475   | 0.218 4642 | 9.932 3295 | 127 | 20 |    |
| 3 38.1  | 50 | 9.713 9001 | 348 | 9.781 5834 | 476   | 0.218 4166 | 9.932 3168 | 127 | 10 |    |
| 4 50.8  | 10 | 9.713 9349 | 348 | 9.781 6309 | 475   | 0.218 3691 | 9.932 3040 | 128 | 0  | 50 |
| 5 63.5  |    |            |     |            |       |            |            |     |    |    |
| 6 76.2  |    |            |     |            |       |            |            |     |    |    |
| 7 88.9  |    |            |     |            |       |            |            |     |    |    |
| 8 101.6 |    |            |     |            |       |            |            |     |    |    |
| 9 114.3 |    |            |     |            |       |            |            |     |    |    |
|         | "  | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d.  | "  |    |



|    | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d.  | "  |    |
|----|----|------------|-----|------------|-------|------------|------------|-----|----|----|
| 10 | o  | 9.713 9349 | 348 | 9.781 6309 | 476   | 0.218 3691 | 9.932 3040 | 127 | o  | 50 |
|    | 10 | 9.713 9697 | 349 | 9.781 6785 | 475   | 0.218 3215 | 9.932 2913 | 128 | 50 |    |
|    | 20 | 9.714 0046 | 348 | 9.781 7260 | 475   | 0.218 2740 | 9.932 2785 | 127 | 40 |    |
|    | 30 | 9.714 0394 | 348 | 9.781 7735 | 475   | 0.218 2265 | 9.932 2658 | 127 | 30 |    |
|    | 40 | 9.714 0742 | 347 | 9.781 8211 | 475   | 0.218 1789 | 9.932 2531 | 128 | 20 |    |
|    | 50 | 9.714 1089 | 348 | 9.781 8686 | 475   | 0.218 1314 | 9.932 2403 | 127 | 10 |    |
| 11 | o  | 9.714 1437 | 348 | 9.781 9162 | 475   | 0.218 0838 | 9.932 2276 | 128 | o  | 49 |
|    | 10 | 9.714 1785 | 348 | 9.781 9637 | 475   | 0.218 0363 | 9.932 2148 | 127 | 50 |    |
|    | 20 | 9.714 2133 | 348 | 9.782 0112 | 475   | 0.217 9888 | 9.932 2021 | 128 | 40 |    |
|    | 30 | 9.714 2481 | 348 | 9.782 0587 | 475   | 0.217 9413 | 9.932 1893 | 127 | 30 |    |
|    | 40 | 9.714 2829 | 347 | 9.782 1063 | 475   | 0.217 8937 | 9.932 1766 | 127 | 20 |    |
|    | 50 | 9.714 3176 | 348 | 9.782 1538 | 475   | 0.217 8462 | 9.932 1639 | 128 | 10 |    |
| 12 | o  | 9.714 3524 | 348 | 9.782 2013 | 475   | 0.217 7987 | 9.932 1511 | 128 | o  | 48 |
|    | 10 | 9.714 3872 | 347 | 9.782 2488 | 475   | 0.217 7512 | 9.932 1383 | 127 | 50 |    |
|    | 20 | 9.714 4219 | 348 | 9.782 2963 | 475   | 0.217 7037 | 9.932 1256 | 128 | 40 |    |
|    | 30 | 9.714 4567 | 347 | 9.782 3438 | 475   | 0.217 6562 | 9.932 1128 | 127 | 30 |    |
|    | 40 | 9.714 4914 | 348 | 9.782 3914 | 475   | 0.217 6086 | 9.932 1001 | 128 | 20 |    |
|    | 50 | 9.714 5262 | 347 | 9.782 4389 | 475   | 0.217 5611 | 9.932 0873 | 127 | 10 |    |
| 13 | o  | 9.714 5609 | 348 | 9.782 4864 | 475   | 0.217 5136 | 9.932 0746 | 128 | o  | 47 |
|    | 10 | 9.714 5957 | 347 | 9.782 5339 | 475   | 0.217 4661 | 9.932 0618 | 128 | 50 |    |
|    | 20 | 9.714 6304 | 347 | 9.782 5814 | 475   | 0.217 4186 | 9.932 0490 | 127 | 40 |    |
|    | 30 | 9.714 6651 | 348 | 9.782 6289 | 475   | 0.217 3711 | 9.932 0363 | 128 | 30 |    |
|    | 40 | 9.714 6999 | 347 | 9.782 6764 | 475   | 0.217 3236 | 9.932 0235 | 128 | 20 |    |
|    | 50 | 9.714 7346 | 347 | 9.782 7239 | 474   | 0.217 2761 | 9.932 0107 | 127 | 10 |    |
| 14 | o  | 9.714 7693 | 347 | 9.782 7713 | 475   | 0.217 2287 | 9.931 9980 | 128 | o  | 46 |
|    | 10 | 9.714 8040 | 348 | 9.782 8188 | 475   | 0.217 1812 | 9.931 9852 | 128 | 50 |    |
|    | 20 | 9.714 8388 | 347 | 9.782 8663 | 475   | 0.217 1337 | 9.931 9724 | 127 | 40 |    |
|    | 30 | 9.714 8735 | 347 | 9.782 9138 | 475   | 0.217 0862 | 9.931 9597 | 128 | 30 |    |
|    | 40 | 9.714 9082 | 347 | 9.782 9613 | 475   | 0.217 0387 | 9.931 9469 | 128 | 20 |    |
|    | 50 | 9.714 9429 | 347 | 9.783 0088 | 474   | 0.216 9912 | 9.931 9341 | 128 | 10 |    |
| 15 | o  | 9.714 9776 | 347 | 9.783 0562 | 475   | 0.216 9438 | 9.931 9213 | 127 | o  | 45 |
|    | 10 | 9.715 0123 | 347 | 9.783 1037 | 475   | 0.216 8963 | 9.931 9086 | 128 | 50 |    |
|    | 20 | 9.715 0470 | 347 | 9.783 1512 | 474   | 0.216 8488 | 9.931 8958 | 128 | 40 |    |
|    | 30 | 9.715 0817 | 346 | 9.783 1986 | 475   | 0.216 8014 | 9.931 8830 | 128 | 30 |    |
|    | 40 | 9.715 1163 | 347 | 9.783 2461 | 475   | 0.216 7539 | 9.931 8702 | 128 | 20 |    |
|    | 50 | 9.715 1510 | 347 | 9.783 2936 | 474   | 0.216 7064 | 9.931 8574 | 127 | 10 |    |
| 16 | o  | 9.715 1857 | 347 | 9.783 3410 | 475   | 0.216 6590 | 9.931 8447 | 128 | o  | 44 |
|    | 10 | 9.715 2204 | 346 | 9.783 3885 | 475   | 0.216 6115 | 9.931 8319 | 128 | 50 |    |
|    | 20 | 9.715 2550 | 347 | 9.783 4360 | 474   | 0.216 5640 | 9.931 8191 | 128 | 40 |    |
|    | 30 | 9.715 2897 | 347 | 9.783 4834 | 475   | 0.216 5166 | 9.931 8063 | 128 | 30 |    |
|    | 40 | 9.715 3244 | 346 | 9.783 5309 | 474   | 0.216 4691 | 9.931 7935 | 128 | 20 |    |
|    | 50 | 9.715 3590 | 347 | 9.783 5783 | 475   | 0.216 4217 | 9.931 7807 | 128 | 10 |    |
| 17 | o  | 9.715 3937 | 346 | 9.783 6258 | 474   | 0.216 3742 | 9.931 7679 | 128 | o  | 43 |
|    | 10 | 9.715 4283 | 347 | 9.783 6732 | 474   | 0.216 3268 | 9.931 7551 | 128 | 50 |    |
|    | 20 | 9.715 4630 | 346 | 9.783 7206 | 475   | 0.216 2794 | 9.931 7423 | 128 | 40 |    |
|    | 30 | 9.715 4976 | 347 | 9.783 7681 | 474   | 0.216 2319 | 9.931 7295 | 128 | 30 |    |
|    | 40 | 9.715 5323 | 346 | 9.783 8155 | 475   | 0.216 1845 | 9.931 7167 | 128 | 20 |    |
|    | 50 | 9.715 5669 | 346 | 9.783 8630 | 474   | 0.216 1370 | 9.931 7039 | 128 | 10 |    |
| 18 | o  | 9.715 6015 | 347 | 9.783 9104 | 474   | 0.216 0896 | 9.931 6911 | 128 | o  | 42 |
|    | 10 | 9.715 6362 | 346 | 9.783 9578 | 474   | 0.216 0422 | 9.931 6783 | 128 | 50 |    |
|    | 20 | 9.715 6708 | 346 | 9.784 0052 | 475   | 0.215 9948 | 9.931 6655 | 128 | 40 |    |
|    | 30 | 9.715 7054 | 346 | 9.784 0527 | 474   | 0.215 9473 | 9.931 6527 | 128 | 30 |    |
|    | 40 | 9.715 7400 | 346 | 9.784 1001 | 474   | 0.215 8999 | 9.931 6399 | 128 | 20 |    |
|    | 50 | 9.715 7746 | 346 | 9.784 1475 | 474   | 0.215 8525 | 9.931 6271 | 128 | 10 |    |
| 19 | o  | 9.715 8092 | 346 | 9.784 1949 | 474   | 0.215 8051 | 9.931 6143 | 128 | o  | 41 |
|    | 10 | 9.715 8438 | 346 | 9.784 2423 | 475   | 0.215 7577 | 9.931 6015 | 128 | 50 |    |
|    | 20 | 9.715 8784 | 346 | 9.784 2898 | 474   | 0.215 7102 | 9.931 5887 | 128 | 40 |    |
|    | 30 | 9.715 9130 | 346 | 9.784 3372 | 474   | 0.215 6628 | 9.931 5759 | 128 | 30 |    |
|    | 40 | 9.715 9476 | 346 | 9.784 3846 | 474   | 0.215 6154 | 9.931 5631 | 129 | 20 |    |
|    | 50 | 9.715 9822 | 346 | 9.784 4320 | 474   | 0.215 5680 | 9.931 5502 | 128 | 10 |    |
| 20 | o  | 9.716 0168 | 346 | 9.784 4794 | 474   | 0.215 5206 | 9.931 5374 | 128 | o  | 40 |

475  
1 47.5  
2 95.0  
3 142.5  
4 190.0  
5 237.5  
6 285.0  
7 332.5  
8 380.0  
9 427.5

474  
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2 94.8  
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348  
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4 139.2  
5 174.0  
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346  
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128  
1 12.8  
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3 38.4  
4 51.2  
5 64.0  
6 76.8  
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8 102.4  
9 115.2



[illegible]



|    | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d.  | "  |    |
|----|----|------------|-----|------------|-------|------------|------------|-----|----|----|
| 30 | 0  | 9.718 0851 | 344 | 9.787 3193 | 473   | 0.212 6807 | 9.930 7658 | 129 | 0  | 30 |
|    | 10 | 9.718 1195 | 343 | 9.787 3666 | 472   | 0.212 6334 | 9.930 7529 | 129 | 50 |    |
|    | 20 | 9.718 1538 | 343 | 9.787 4138 | 472   | 0.212 5862 | 9.930 7400 | 129 | 40 |    |
|    | 30 | 9.718 1882 | 343 | 9.787 4611 | 473   | 0.212 5389 | 9.930 7271 | 129 | 30 |    |
|    | 40 | 9.718 2225 | 343 | 9.787 5083 | 472   | 0.212 4917 | 9.930 7142 | 129 | 20 |    |
|    | 50 | 9.718 2568 | 343 | 9.787 5556 | 473   | 0.212 4444 | 9.930 7013 | 129 | 10 |    |
| 31 | 0  | 9.718 2912 | 343 | 9.787 6028 | 472   | 0.212 3972 | 9.930 6883 | 129 | 0  | 29 |
|    | 10 | 9.718 3255 | 344 | 9.787 6501 | 472   | 0.212 3499 | 9.930 6754 | 129 | 50 |    |
|    | 20 | 9.718 3599 | 344 | 9.787 6973 | 472   | 0.212 3027 | 9.930 6625 | 129 | 40 |    |
|    | 30 | 9.718 3942 | 343 | 9.787 7446 | 473   | 0.212 2554 | 9.930 6496 | 129 | 30 |    |
|    | 40 | 9.718 4285 | 343 | 9.787 7918 | 472   | 0.212 2082 | 9.930 6367 | 129 | 20 |    |
|    | 50 | 9.718 4628 | 343 | 9.787 8391 | 473   | 0.212 1609 | 9.930 6238 | 129 | 10 |    |
| 32 | 0  | 9.718 4971 | 344 | 9.787 8863 | 472   | 0.212 1137 | 9.930 6109 | 129 | 0  | 28 |
|    | 10 | 9.718 5315 | 343 | 9.787 9335 | 472   | 0.212 0665 | 9.930 5979 | 129 | 50 |    |
|    | 20 | 9.718 5658 | 343 | 9.787 9807 | 472   | 0.212 0193 | 9.930 5850 | 129 | 40 |    |
|    | 30 | 9.718 6001 | 343 | 9.788 0280 | 473   | 0.211 9720 | 9.930 5721 | 129 | 30 |    |
|    | 40 | 9.718 6344 | 343 | 9.788 0752 | 472   | 0.211 9248 | 9.930 5592 | 129 | 20 |    |
|    | 50 | 9.718 6687 | 343 | 9.788 1224 | 472   | 0.211 8776 | 9.930 5462 | 129 | 10 |    |
| 33 | 0  | 9.718 7030 | 344 | 9.788 1696 | 473   | 0.211 8304 | 9.930 5333 | 129 | 0  | 27 |
|    | 10 | 9.718 7372 | 343 | 9.788 2169 | 472   | 0.211 7831 | 9.930 5204 | 129 | 50 |    |
|    | 20 | 9.718 7715 | 343 | 9.788 2641 | 472   | 0.211 7359 | 9.930 5075 | 129 | 40 |    |
|    | 30 | 9.718 8058 | 343 | 9.788 3113 | 472   | 0.211 6887 | 9.930 4945 | 129 | 30 |    |
|    | 40 | 9.718 8401 | 343 | 9.788 3585 | 472   | 0.211 6415 | 9.930 4816 | 129 | 20 |    |
|    | 50 | 9.718 8744 | 343 | 9.788 4057 | 472   | 0.211 5943 | 9.930 4687 | 129 | 10 |    |
| 34 | 0  | 9.718 9086 | 344 | 9.788 4529 | 472   | 0.211 5471 | 9.930 4557 | 129 | 0  | 26 |
|    | 10 | 9.718 9429 | 343 | 9.788 5001 | 472   | 0.211 4999 | 9.930 4428 | 129 | 50 |    |
|    | 20 | 9.718 9772 | 343 | 9.788 5473 | 472   | 0.211 4527 | 9.930 4298 | 129 | 40 |    |
|    | 30 | 9.719 0114 | 343 | 9.788 5945 | 472   | 0.211 4055 | 9.930 4169 | 129 | 30 |    |
|    | 40 | 9.719 0457 | 342 | 9.788 6417 | 472   | 0.211 3583 | 9.930 4040 | 129 | 20 |    |
|    | 50 | 9.719 0799 | 343 | 9.788 6889 | 472   | 0.211 3111 | 9.930 3910 | 129 | 10 |    |
| 35 | 0  | 9.719 1142 | 342 | 9.788 7361 | 472   | 0.211 2639 | 9.930 3781 | 129 | 0  | 25 |
|    | 10 | 9.719 1484 | 343 | 9.788 7833 | 472   | 0.211 2167 | 9.930 3651 | 129 | 50 |    |
|    | 20 | 9.719 1827 | 342 | 9.788 8305 | 472   | 0.211 1695 | 9.930 3522 | 129 | 40 |    |
|    | 30 | 9.719 2169 | 342 | 9.788 8777 | 472   | 0.211 1223 | 9.930 3392 | 129 | 30 |    |
|    | 40 | 9.719 2511 | 343 | 9.788 9249 | 471   | 0.211 0751 | 9.930 3263 | 129 | 20 |    |
|    | 50 | 9.719 2854 | 342 | 9.788 9720 | 472   | 0.211 0280 | 9.930 3133 | 129 | 10 |    |
| 36 | 0  | 9.719 3196 | 342 | 9.789 0192 | 472   | 0.210 9808 | 9.930 3004 | 129 | 0  | 24 |
|    | 10 | 9.719 3538 | 342 | 9.789 0664 | 472   | 0.210 9336 | 9.930 2874 | 129 | 50 |    |
|    | 20 | 9.719 3880 | 342 | 9.789 1136 | 472   | 0.210 8864 | 9.930 2745 | 129 | 40 |    |
|    | 30 | 9.719 4221 | 342 | 9.789 1607 | 471   | 0.210 8393 | 9.930 2615 | 129 | 30 |    |
|    | 40 | 9.719 4565 | 342 | 9.789 2079 | 472   | 0.210 7921 | 9.930 2486 | 129 | 20 |    |
|    | 50 | 9.719 4907 | 342 | 9.789 2551 | 472   | 0.210 7449 | 9.930 2356 | 129 | 10 |    |
| 37 | 0  | 9.719 5249 | 342 | 9.789 3023 | 471   | 0.210 6977 | 9.930 2226 | 129 | 0  | 23 |
|    | 10 | 9.719 5591 | 342 | 9.789 3494 | 472   | 0.210 6506 | 9.930 2097 | 129 | 50 |    |
|    | 20 | 9.719 5933 | 342 | 9.789 3966 | 471   | 0.210 6034 | 9.930 1967 | 129 | 40 |    |
|    | 30 | 9.719 6275 | 342 | 9.789 4437 | 472   | 0.210 5563 | 9.930 1837 | 129 | 30 |    |
|    | 40 | 9.719 6617 | 342 | 9.789 4909 | 471   | 0.210 5091 | 9.930 1708 | 129 | 20 |    |
|    | 50 | 9.719 6959 | 341 | 9.789 5380 | 472   | 0.210 4620 | 9.930 1578 | 129 | 10 |    |
| 38 | 0  | 9.719 7300 | 342 | 9.789 5852 | 471   | 0.210 4148 | 9.930 1448 | 129 | 0  | 22 |
|    | 10 | 9.719 7642 | 342 | 9.789 6323 | 472   | 0.210 3677 | 9.930 1319 | 129 | 50 |    |
|    | 20 | 9.719 7984 | 342 | 9.789 6795 | 471   | 0.210 3205 | 9.930 1189 | 129 | 40 |    |
|    | 30 | 9.719 8326 | 341 | 9.789 7266 | 472   | 0.210 2734 | 9.930 1059 | 129 | 30 |    |
|    | 40 | 9.719 8667 | 342 | 9.789 7738 | 471   | 0.210 2262 | 9.930 0929 | 129 | 20 |    |
|    | 50 | 9.719 9009 | 341 | 9.789 8209 | 471   | 0.210 1791 | 9.930 0800 | 129 | 10 |    |
| 39 | 0  | 9.719 9350 | 342 | 9.789 8681 | 472   | 0.210 1319 | 9.930 0670 | 129 | 0  | 21 |
|    | 10 | 9.719 9692 | 342 | 9.789 9152 | 471   | 0.210 0848 | 9.930 0540 | 129 | 50 |    |
|    | 20 | 9.720 0034 | 341 | 9.789 9623 | 472   | 0.210 0377 | 9.930 0410 | 129 | 40 |    |
|    | 30 | 9.720 0375 | 342 | 9.790 0095 | 471   | 0.209 9905 | 9.930 0281 | 129 | 30 |    |
|    | 40 | 9.720 0717 | 341 | 9.790 0566 | 471   | 0.209 9434 | 9.930 0151 | 129 | 20 |    |
|    | 50 | 9.720 1058 | 341 | 9.790 1037 | 471   | 0.209 8963 | 9.930 0021 | 129 | 10 |    |
| 40 | 0  | 9.720 1399 | 341 | 9.790 1508 | 471   | 0.209 8492 | 9.929 9891 | 129 | 0  | 20 |
|    | "  | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d.  | "  |    |

472  
1 47.2  
2 94.4  
3 141.6  
4 188.8  
5 236.0  
6 283.2  
7 330.4  
8 377.6  
9 424.8

471  
1 47.1  
2 94.4  
3 141.3  
4 188.4  
5 235.5  
6 282.6  
7 329.7  
8 376.8  
9 423.9

343  
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2 68.6  
3 102.9  
4 137.2  
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6 205.8  
7 240.1  
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9 308.7

342  
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2 68.4  
3 102.6  
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6 205.2  
7 239.4  
8 273.6  
9 307.8

129  
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5 64.5  
6 77.4  
7 90.3  
8 103.2  
9 116.1

130  
1 13.0  
2 26.0  
3 39.0  
4 52.0  
5 65.0  
6 78.0  
7 91.0  
8 104.0  
9 117.0



| t  | n  | sin        | d.  | Tang       | d. c. | Cotg       | cos        | d.  | n  | t  |
|----|----|------------|-----|------------|-------|------------|------------|-----|----|----|
| 40 | 0  | 9.720 1399 | 333 | 9.720 1398 | 423   | 0.000 0000 | 9.999 9999 | 139 | 0  | 20 |
|    | 10 | 9.720 1731 | 334 | 9.720 1730 | 423   | 0.000 0000 | 9.999 9999 | 139 | 50 |    |
|    | 20 | 9.720 2062 | 334 | 9.720 2061 | 423   | 0.000 0000 | 9.999 9999 | 139 | 40 |    |
|    | 30 | 9.720 2393 | 334 | 9.720 2392 | 423   | 0.000 0000 | 9.999 9999 | 139 | 30 |    |
|    | 40 | 9.720 2724 | 334 | 9.720 2723 | 423   | 0.000 0000 | 9.999 9999 | 139 | 20 |    |
|    | 50 | 9.720 3055 | 334 | 9.720 3054 | 423   | 0.000 0000 | 9.999 9999 | 139 | 10 |    |
| 41 | 0  | 9.720 3386 | 334 | 9.720 3385 | 423   | 0.000 0000 | 9.999 9999 | 139 | 0  | 19 |
|    | 10 | 9.720 3717 | 334 | 9.720 3716 | 423   | 0.000 0000 | 9.999 9999 | 139 | 50 |    |
|    | 20 | 9.720 4048 | 334 | 9.720 4047 | 423   | 0.000 0000 | 9.999 9999 | 139 | 40 |    |
|    | 30 | 9.720 4379 | 334 | 9.720 4378 | 423   | 0.000 0000 | 9.999 9999 | 139 | 30 |    |
|    | 40 | 9.720 4710 | 334 | 9.720 4709 | 423   | 0.000 0000 | 9.999 9999 | 139 | 20 |    |
|    | 50 | 9.720 5041 | 334 | 9.720 5040 | 423   | 0.000 0000 | 9.999 9999 | 139 | 10 |    |
| 42 | 0  | 9.720 5372 | 334 | 9.720 5371 | 423   | 0.000 0000 | 9.999 9999 | 139 | 0  | 18 |
|    | 10 | 9.720 5703 | 334 | 9.720 5702 | 423   | 0.000 0000 | 9.999 9999 | 139 | 50 |    |
|    | 20 | 9.720 6034 | 334 | 9.720 6033 | 423   | 0.000 0000 | 9.999 9999 | 139 | 40 |    |
|    | 30 | 9.720 6365 | 334 | 9.720 6364 | 423   | 0.000 0000 | 9.999 9999 | 139 | 30 |    |
|    | 40 | 9.720 6696 | 334 | 9.720 6695 | 423   | 0.000 0000 | 9.999 9999 | 139 | 20 |    |
|    | 50 | 9.720 7027 | 334 | 9.720 7026 | 423   | 0.000 0000 | 9.999 9999 | 139 | 10 |    |
| 43 | 0  | 9.720 7358 | 334 | 9.720 7357 | 423   | 0.000 0000 | 9.999 9999 | 139 | 0  | 17 |
|    | 10 | 9.720 7689 | 334 | 9.720 7688 | 423   | 0.000 0000 | 9.999 9999 | 139 | 50 |    |
|    | 20 | 9.720 8020 | 334 | 9.720 8019 | 423   | 0.000 0000 | 9.999 9999 | 139 | 40 |    |
|    | 30 | 9.720 8351 | 334 | 9.720 8350 | 423   | 0.000 0000 | 9.999 9999 | 139 | 30 |    |
|    | 40 | 9.720 8682 | 334 | 9.720 8681 | 423   | 0.000 0000 | 9.999 9999 | 139 | 20 |    |
|    | 50 | 9.720 9013 | 334 | 9.720 9012 | 423   | 0.000 0000 | 9.999 9999 | 139 | 10 |    |
| 44 | 0  | 9.720 9344 | 334 | 9.720 9343 | 423   | 0.000 0000 | 9.999 9999 | 139 | 0  | 16 |
|    | 10 | 9.720 9675 | 334 | 9.720 9674 | 423   | 0.000 0000 | 9.999 9999 | 139 | 50 |    |
|    | 20 | 9.720 1006 | 334 | 9.720 1005 | 423   | 0.000 0000 | 9.999 9999 | 139 | 40 |    |
|    | 30 | 9.720 1037 | 334 | 9.720 1036 | 423   | 0.000 0000 | 9.999 9999 | 139 | 30 |    |
|    | 40 | 9.720 1068 | 334 | 9.720 1067 | 423   | 0.000 0000 | 9.999 9999 | 139 | 20 |    |
|    | 50 | 9.720 1099 | 334 | 9.720 1098 | 423   | 0.000 0000 | 9.999 9999 | 139 | 10 |    |
| 45 | 0  | 9.720 1130 | 334 | 9.720 1129 | 423   | 0.000 0000 | 9.999 9999 | 139 | 0  | 15 |
|    | 10 | 9.720 1161 | 334 | 9.720 1160 | 423   | 0.000 0000 | 9.999 9999 | 139 | 50 |    |
|    | 20 | 9.720 1192 | 334 | 9.720 1191 | 423   | 0.000 0000 | 9.999 9999 | 139 | 40 |    |
|    | 30 | 9.720 1223 | 334 | 9.720 1222 | 423   | 0.000 0000 | 9.999 9999 | 139 | 30 |    |
|    | 40 | 9.720 1254 | 334 | 9.720 1253 | 423   | 0.000 0000 | 9.999 9999 | 139 | 20 |    |
|    | 50 | 9.720 1285 | 334 | 9.720 1284 | 423   | 0.000 0000 | 9.999 9999 | 139 | 10 |    |
| 46 | 0  | 9.720 1316 | 334 | 9.720 1315 | 423   | 0.000 0000 | 9.999 9999 | 139 | 0  | 14 |
|    | 10 | 9.720 1347 | 334 | 9.720 1346 | 423   | 0.000 0000 | 9.999 9999 | 139 | 50 |    |
|    | 20 | 9.720 1378 | 334 | 9.720 1377 | 423   | 0.000 0000 | 9.999 9999 | 139 | 40 |    |
|    | 30 | 9.720 1409 | 334 | 9.720 1408 | 423   | 0.000 0000 | 9.999 9999 | 139 | 30 |    |
|    | 40 | 9.720 1440 | 334 | 9.720 1439 | 423   | 0.000 0000 | 9.999 9999 | 139 | 20 |    |
|    | 50 | 9.720 1471 | 334 | 9.720 1470 | 423   | 0.000 0000 | 9.999 9999 | 139 | 10 |    |
| 47 | 0  | 9.720 1502 | 334 | 9.720 1501 | 423   | 0.000 0000 | 9.999 9999 | 139 | 0  | 13 |
|    | 10 | 9.720 1533 | 334 | 9.720 1532 | 423   | 0.000 0000 | 9.999 9999 | 139 | 50 |    |
|    | 20 | 9.720 1564 | 334 | 9.720 1563 | 423   | 0.000 0000 | 9.999 9999 | 139 | 40 |    |
|    | 30 | 9.720 1595 | 334 | 9.720 1594 | 423   | 0.000 0000 | 9.999 9999 | 139 | 30 |    |
|    | 40 | 9.720 1626 | 334 | 9.720 1625 | 423   | 0.000 0000 | 9.999 9999 | 139 | 20 |    |
|    | 50 | 9.720 1657 | 334 | 9.720 1656 | 423   | 0.000 0000 | 9.999 9999 | 139 | 10 |    |
| 48 | 0  | 9.720 1688 | 334 | 9.720 1687 | 423   | 0.000 0000 | 9.999 9999 | 139 | 0  | 12 |
|    | 10 | 9.720 1719 | 334 | 9.720 1718 | 423   | 0.000 0000 | 9.999 9999 | 139 | 50 |    |
|    | 20 | 9.720 1750 | 334 | 9.720 1749 | 423   | 0.000 0000 | 9.999 9999 | 139 | 40 |    |
|    | 30 | 9.720 1781 | 334 | 9.720 1780 | 423   | 0.000 0000 | 9.999 9999 | 139 | 30 |    |
|    | 40 | 9.720 1812 | 334 | 9.720 1811 | 423   | 0.000 0000 | 9.999 9999 | 139 | 20 |    |
|    | 50 | 9.720 1843 | 334 | 9.720 1842 | 423   | 0.000 0000 | 9.999 9999 | 139 | 10 |    |
| 49 | 0  | 9.720 1874 | 334 | 9.720 1873 | 423   | 0.000 0000 | 9.999 9999 | 139 | 0  | 11 |
|    | 10 | 9.720 1905 | 334 | 9.720 1904 | 423   | 0.000 0000 | 9.999 9999 | 139 | 50 |    |
|    | 20 | 9.720 1936 | 334 | 9.720 1935 | 423   | 0.000 0000 | 9.999 9999 | 139 | 40 |    |
|    | 30 | 9.720 1967 | 334 | 9.720 1966 | 423   | 0.000 0000 | 9.999 9999 | 139 | 30 |    |
|    | 40 | 9.720 1998 | 334 | 9.720 1997 | 423   | 0.000 0000 | 9.999 9999 | 139 | 20 |    |
|    | 50 | 9.720 2029 | 334 | 9.720 2028 | 423   | 0.000 0000 | 9.999 9999 | 139 | 10 |    |
| 50 | 0  | 9.720 2060 | 334 | 9.720 2059 | 423   | 0.000 0000 | 9.999 9999 | 139 | 0  | 10 |
|    | 10 | 9.720 2091 | 334 | 9.720 2090 | 423   | 0.000 0000 | 9.999 9999 | 139 | 50 |    |
|    | 20 | 9.720 2122 | 334 | 9.720 2121 | 423   | 0.000 0000 | 9.999 9999 | 139 | 40 |    |
|    | 30 | 9.720 2153 | 334 | 9.720 2152 | 423   | 0.000 0000 | 9.999 9999 | 139 | 30 |    |
|    | 40 | 9.720 2184 | 334 | 9.720 2183 | 423   | 0.000 0000 | 9.999 9999 | 139 | 20 |    |
|    | 50 | 9.720 2215 | 334 | 9.720 2214 | 423   | 0.000 0000 | 9.999 9999 | 139 | 10 |    |
| t  | n  | cos        | d.  | Cotg       | d. c. | Tang       | sin        | d.  | n  | t  |



|    | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d.  | "  |    |
|----|----|------------|-----|------------|-------|------------|------------|-----|----|----|
| 50 | o  | 9.722 1814 | 339 | 9.792 9741 | 470   | 0.207 0259 | 9.929 2073 | 130 | o  | 10 |
|    | 10 | 9.722 2153 | 339 | 9.793 0211 | 470   | 0.206 9789 | 9.929 1943 | 131 | 50 |    |
|    | 20 | 9.722 2492 | 340 | 9.793 0681 | 469   | 0.206 9319 | 9.929 1812 | 131 | 40 |    |
|    | 30 | 9.722 2832 | 339 | 9.793 1150 | 470   | 0.206 8850 | 9.929 1681 | 131 | 30 |    |
|    | 40 | 9.722 3171 | 338 | 9.793 1620 | 470   | 0.206 8380 | 9.929 1550 | 131 | 20 |    |
|    | 50 | 9.722 3509 | 339 | 9.793 2090 | 470   | 0.206 7910 | 9.929 1420 | 130 | 10 |    |
| 51 | o  | 9.722 3848 | 339 | 9.793 2560 | 470   | 0.206 7440 | 9.929 1289 | 131 | o  | 9  |
|    | 10 | 9.722 4187 | 339 | 9.793 3029 | 469   | 0.206 6971 | 9.929 1158 | 131 | 50 |    |
|    | 20 | 9.722 4526 | 339 | 9.793 3499 | 470   | 0.206 6501 | 9.929 1027 | 131 | 40 |    |
|    | 30 | 9.722 4865 | 339 | 9.793 3969 | 470   | 0.206 6031 | 9.929 0896 | 131 | 30 |    |
|    | 40 | 9.722 5204 | 339 | 9.793 4438 | 469   | 0.206 5562 | 9.929 0765 | 131 | 20 |    |
|    | 50 | 9.722 5543 | 338 | 9.793 4908 | 470   | 0.206 5092 | 9.929 0635 | 130 | 10 |    |
| 52 | o  | 9.722 5881 | 339 | 9.793 5378 | 470   | 0.206 4622 | 9.929 0504 | 131 | o  | 8  |
|    | 10 | 9.722 6220 | 339 | 9.793 5847 | 469   | 0.206 4153 | 9.929 0373 | 131 | 50 |    |
|    | 20 | 9.722 6559 | 338 | 9.793 6317 | 470   | 0.206 3683 | 9.929 0242 | 131 | 40 |    |
|    | 30 | 9.722 6897 | 338 | 9.793 6786 | 469   | 0.206 3214 | 9.929 0111 | 131 | 30 |    |
|    | 40 | 9.722 7236 | 339 | 9.793 7256 | 470   | 0.206 2744 | 9.928 9980 | 131 | 20 |    |
|    | 50 | 9.722 7574 | 338 | 9.793 7725 | 469   | 0.206 2275 | 9.928 9849 | 131 | 10 |    |
| 53 | o  | 9.722 7913 | 338 | 9.793 8195 | 470   | 0.206 1805 | 9.928 9718 | 131 | o  | 7  |
|    | 10 | 9.722 8251 | 339 | 9.793 8664 | 469   | 0.206 1336 | 9.928 9587 | 131 | 50 |    |
|    | 20 | 9.722 8590 | 339 | 9.793 9134 | 470   | 0.206 0866 | 9.928 9456 | 131 | 40 |    |
|    | 30 | 9.722 8928 | 338 | 9.793 9603 | 469   | 0.206 0397 | 9.928 9325 | 131 | 30 |    |
|    | 40 | 9.722 9267 | 339 | 9.794 0072 | 469   | 0.205 9928 | 9.928 9194 | 131 | 20 |    |
|    | 50 | 9.722 9605 | 338 | 9.794 0542 | 470   | 0.205 9458 | 9.928 9063 | 131 | 10 |    |
| 54 | o  | 9.722 9943 | 338 | 9.794 1011 | 469   | 0.205 8989 | 9.928 8932 | 131 | o  | 6  |
|    | 10 | 9.723 0281 | 339 | 9.794 1480 | 470   | 0.205 8520 | 9.928 8801 | 131 | 50 |    |
|    | 20 | 9.723 0620 | 338 | 9.794 1950 | 469   | 0.205 8050 | 9.928 8670 | 131 | 40 |    |
|    | 30 | 9.723 0958 | 338 | 9.794 2419 | 469   | 0.205 7581 | 9.928 8539 | 131 | 30 |    |
|    | 40 | 9.723 1296 | 338 | 9.794 2888 | 469   | 0.205 7112 | 9.928 8408 | 131 | 20 |    |
|    | 50 | 9.723 1634 | 338 | 9.794 3357 | 470   | 0.205 6643 | 9.928 8277 | 132 | 10 |    |
| 55 | o  | 9.723 1972 | 338 | 9.794 3827 | 469   | 0.205 6173 | 9.928 8145 | 131 | o  | 5  |
|    | 10 | 9.723 2310 | 338 | 9.794 4296 | 469   | 0.205 5704 | 9.928 8014 | 131 | 50 |    |
|    | 20 | 9.723 2648 | 338 | 9.794 4765 | 469   | 0.205 5235 | 9.928 7883 | 131 | 40 |    |
|    | 30 | 9.723 2986 | 338 | 9.794 5234 | 469   | 0.205 4766 | 9.928 7752 | 131 | 30 |    |
|    | 40 | 9.723 3324 | 338 | 9.794 5703 | 469   | 0.205 4297 | 9.928 7621 | 131 | 20 |    |
|    | 50 | 9.723 3662 | 338 | 9.794 6172 | 469   | 0.205 3828 | 9.928 7490 | 131 | 10 |    |
| 56 | o  | 9.723 4000 | 338 | 9.794 6641 | 469   | 0.205 3359 | 9.928 7358 | 131 | o  | 4  |
|    | 10 | 9.723 4338 | 337 | 9.794 7110 | 469   | 0.205 2890 | 9.928 7227 | 131 | 50 |    |
|    | 20 | 9.723 4675 | 338 | 9.794 7579 | 469   | 0.205 2421 | 9.928 7096 | 131 | 40 |    |
|    | 30 | 9.723 5013 | 338 | 9.794 8048 | 469   | 0.205 1952 | 9.928 6965 | 132 | 30 |    |
|    | 40 | 9.723 5351 | 337 | 9.794 8517 | 469   | 0.205 1483 | 9.928 6833 | 131 | 20 |    |
|    | 50 | 9.723 5688 | 338 | 9.794 8986 | 469   | 0.205 1014 | 9.928 6702 | 131 | 10 |    |
| 57 | o  | 9.723 6026 | 338 | 9.794 9455 | 469   | 0.205 0545 | 9.928 6571 | 132 | o  | 3  |
|    | 10 | 9.723 6364 | 337 | 9.794 9924 | 469   | 0.205 0076 | 9.928 6439 | 131 | 50 |    |
|    | 20 | 9.723 6701 | 338 | 9.795 0393 | 469   | 0.204 9607 | 9.928 6308 | 131 | 40 |    |
|    | 30 | 9.723 7039 | 337 | 9.795 0862 | 469   | 0.204 9138 | 9.928 6177 | 132 | 30 |    |
|    | 40 | 9.723 7376 | 337 | 9.795 1331 | 469   | 0.204 8669 | 9.928 6045 | 131 | 20 |    |
|    | 50 | 9.723 7714 | 338 | 9.795 1800 | 468   | 0.204 8200 | 9.928 5914 | 131 | 10 |    |
| 58 | o  | 9.723 8051 | 337 | 9.795 2268 | 469   | 0.204 7732 | 9.928 5783 | 132 | o  | 2  |
|    | 10 | 9.723 8388 | 338 | 9.795 2737 | 469   | 0.204 7263 | 9.928 5651 | 131 | 50 |    |
|    | 20 | 9.723 8726 | 337 | 9.795 3206 | 469   | 0.204 6794 | 9.928 5520 | 132 | 40 |    |
|    | 30 | 9.723 9063 | 337 | 9.795 3675 | 468   | 0.204 6325 | 9.928 5388 | 131 | 30 |    |
|    | 40 | 9.723 9400 | 337 | 9.795 4143 | 469   | 0.204 5857 | 9.928 5257 | 132 | 20 |    |
|    | 50 | 9.723 9738 | 338 | 9.795 4612 | 469   | 0.204 5388 | 9.928 5125 | 131 | 10 |    |
| 59 | o  | 9.724 0075 | 337 | 9.795 5081 | 468   | 0.204 4919 | 9.928 4994 | 131 | o  | 1  |
|    | 10 | 9.724 0412 | 337 | 9.795 5549 | 469   | 0.204 4451 | 9.928 4862 | 131 | 50 |    |
|    | 20 | 9.724 0749 | 337 | 9.795 6018 | 469   | 0.204 3982 | 9.928 4731 | 132 | 40 |    |
|    | 30 | 9.724 1086 | 337 | 9.795 6487 | 468   | 0.204 3513 | 9.928 4599 | 131 | 30 |    |
|    | 40 | 9.724 1423 | 337 | 9.795 6955 | 469   | 0.204 3045 | 9.928 4468 | 132 | 20 |    |
|    | 50 | 9.724 1760 | 337 | 9.795 7424 | 468   | 0.204 2576 | 9.928 4336 | 131 | 10 |    |
| 60 | o  | 9.724 2097 | 337 | 9.795 7892 | 468   | 0.204 2108 | 9.928 4205 | 131 | o  | 0  |
|    | "  | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d.  | "  |    |

469

1 46.9

2 93.8

3 140.7

4 187.6

5 234.5

6 281.4

7 328.3

8 375.2

9 422.1

468

1 46.8

2 93.6

3 140.4

4 187.2

5 234.0

6 280.8

7 327.6

8 374.4

9 421.2

338

1 33.8

2 67.6

3 101.4

4 135.2

5 169.0

6 202.8

7 236.6

8 270.4

9 304.2

337

1 33.7

2 67.4

3 101.1

4 134.8

5 168.5

6 202.2

7 235.9

8 269.6

9 303.3

131

1 13.1

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4 52.4

5 65.5

6 78.6

7 91.7

8 104.8

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132

1 13.2

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6 79.2

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9 118.8



|         |     | Sin        | d.  | Tang       | d. c. | Colg       | Con        | d.  |    |    |
|---------|-----|------------|-----|------------|-------|------------|------------|-----|----|----|
| 460     | 0   | 9.724 2097 | 117 | 9.795 2803 | 469   | 0.204 2108 | 9.928 4205 | 132 | 0  | 60 |
| 1 46.9  | 10  | 9.724 2434 | 117 | 9.795 3161 | 468   | 0.204 1679 | 9.928 4074 | 131 | 50 |    |
| 2 91.8  | 20  | 9.724 2771 | 117 | 9.795 3519 | 467   | 0.204 1241 | 9.928 3943 | 131 | 40 |    |
| 3 136.7 | 30  | 9.724 3108 | 117 | 9.795 3876 | 466   | 0.204 0804 | 9.928 3812 | 131 | 30 |    |
| 4 181.6 | 40  | 9.724 3445 | 116 | 9.795 4234 | 465   | 0.204 0367 | 9.928 3681 | 131 | 20 |    |
| 5 226.5 | 50  | 9.724 3782 | 117 | 9.795 4591 | 464   | 0.204 0268 | 9.928 3550 | 131 | 10 |    |
| 6 271.4 | 1   | 9.724 4118 | 117 | 9.795 4949 | 463   | 0.204 0227 | 9.928 3419 | 131 | 0  | 59 |
| 7 316.3 | 10  | 9.724 4455 | 117 | 9.795 5307 | 462   | 0.204 0186 | 9.928 3288 | 131 | 50 |    |
| 8 361.2 | 20  | 9.724 4792 | 116 | 9.795 5664 | 461   | 0.204 0145 | 9.928 3157 | 131 | 40 |    |
| 9 406.1 | 30  | 9.724 5128 | 117 | 9.795 6022 | 460   | 0.204 0104 | 9.928 3026 | 131 | 30 |    |
| 0 451.0 | 40  | 9.724 5465 | 116 | 9.795 6379 | 459   | 0.204 0063 | 9.928 2895 | 131 | 20 |    |
|         | 50  | 9.724 5801 | 117 | 9.795 6737 | 458   | 0.204 0022 | 9.928 2764 | 131 | 10 |    |
| 468     | 2   | 9.724 6138 | 116 | 9.795 7094 | 457   | 0.204 0081 | 9.928 2633 | 131 | 0  | 58 |
| 1 46.8  | 10  | 9.724 6474 | 117 | 9.795 7452 | 456   | 0.204 0040 | 9.928 2502 | 131 | 50 |    |
| 2 91.6  | 20  | 9.724 6811 | 116 | 9.795 7809 | 455   | 0.204 0000 | 9.928 2371 | 131 | 40 |    |
| 3 136.5 | 30  | 9.724 7147 | 117 | 9.795 8167 | 454   | 0.204 0059 | 9.928 2240 | 131 | 30 |    |
| 4 181.4 | 40  | 9.724 7484 | 116 | 9.795 8524 | 453   | 0.204 0018 | 9.928 2109 | 131 | 20 |    |
| 5 226.3 | 50  | 9.724 7820 | 117 | 9.795 8882 | 452   | 0.204 0077 | 9.928 1978 | 131 | 10 |    |
| 6 271.2 | 3   | 9.724 8156 | 116 | 9.795 9239 | 451   | 0.204 0036 | 9.928 1847 | 131 | 0  | 57 |
| 7 316.1 | 10  | 9.724 8493 | 117 | 9.795 9597 | 450   | 0.204 0095 | 9.928 1716 | 131 | 50 |    |
|         | 20  | 9.724 8829 | 116 | 9.795 9954 | 449   | 0.204 0054 | 9.928 1585 | 131 | 40 |    |
| 367     | 30  | 9.724 9165 | 117 | 9.796 0312 | 448   | 0.204 0013 | 9.928 1454 | 131 | 30 |    |
| 1 31.7  | 40  | 9.724 9502 | 116 | 9.796 0669 | 447   | 0.204 0072 | 9.928 1323 | 131 | 20 |    |
| 2 76.6  | 50  | 9.724 9838 | 117 | 9.796 1027 | 446   | 0.204 0031 | 9.928 1192 | 131 | 10 |    |
| 3 121.5 | 4   | 9.725 0174 | 116 | 9.796 1384 | 445   | 0.204 0090 | 9.928 1061 | 131 | 0  | 56 |
| 4 166.4 | 10  | 9.725 0511 | 117 | 9.796 1742 | 444   | 0.204 0049 | 9.928 0930 | 131 | 50 |    |
| 5 211.3 | 20  | 9.725 0847 | 116 | 9.796 2099 | 443   | 0.204 0008 | 9.928 0799 | 131 | 40 |    |
| 6 256.2 | 30  | 9.725 1184 | 117 | 9.796 2457 | 442   | 0.204 0067 | 9.928 0668 | 131 | 30 |    |
| 7 301.1 | 40  | 9.725 1520 | 116 | 9.796 2814 | 441   | 0.204 0026 | 9.928 0537 | 131 | 20 |    |
|         | 50  | 9.725 1857 | 117 | 9.796 3172 | 440   | 0.204 0085 | 9.928 0406 | 131 | 10 |    |
| 336     | 5   | 9.725 2193 | 116 | 9.796 3529 | 439   | 0.204 0044 | 9.928 0275 | 131 | 0  | 55 |
| 1 33.6  | 10  | 9.725 2530 | 117 | 9.796 3887 | 438   | 0.204 0003 | 9.928 0144 | 131 | 50 |    |
| 2 78.5  | 20  | 9.725 2866 | 116 | 9.796 4244 | 437   | 0.204 0062 | 9.928 0013 | 131 | 40 |    |
| 3 123.4 | 30  | 9.725 3203 | 117 | 9.796 4602 | 436   | 0.204 0021 | 9.927 9882 | 131 | 30 |    |
| 4 168.3 | 40  | 9.725 3539 | 116 | 9.796 4959 | 435   | 0.204 0080 | 9.927 9751 | 131 | 20 |    |
| 5 213.2 | 50  | 9.725 3876 | 117 | 9.796 5317 | 434   | 0.204 0039 | 9.927 9620 | 131 | 10 |    |
| 6 258.1 | 6   | 9.725 4212 | 116 | 9.796 5674 | 433   | 0.204 0098 | 9.927 9489 | 131 | 0  | 54 |
| 7 303.0 | 10  | 9.725 4549 | 117 | 9.796 6032 | 432   | 0.204 0057 | 9.927 9358 | 131 | 50 |    |
| 8 347.9 | 20  | 9.725 4885 | 116 | 9.796 6389 | 431   | 0.204 0016 | 9.927 9227 | 131 | 40 |    |
| 9 392.8 | 30  | 9.725 5222 | 117 | 9.796 6747 | 430   | 0.204 0075 | 9.927 9096 | 131 | 30 |    |
| 0 437.7 | 40  | 9.725 5558 | 116 | 9.796 7104 | 429   | 0.204 0034 | 9.927 8965 | 131 | 20 |    |
|         | 50  | 9.725 5895 | 117 | 9.796 7462 | 428   | 0.204 0093 | 9.927 8834 | 131 | 10 |    |
| 131     | 7   | 9.725 6231 | 116 | 9.796 7819 | 427   | 0.204 0052 | 9.927 8703 | 131 | 0  | 53 |
| 1 31.1  | 10  | 9.725 6568 | 117 | 9.796 8177 | 426   | 0.204 0011 | 9.927 8572 | 131 | 50 |    |
| 2 76.0  | 20  | 9.725 6904 | 116 | 9.796 8534 | 425   | 0.204 0070 | 9.927 8441 | 131 | 40 |    |
| 3 120.9 | 30  | 9.725 7241 | 117 | 9.796 8892 | 424   | 0.204 0029 | 9.927 8310 | 131 | 30 |    |
| 4 165.8 | 40  | 9.725 7577 | 116 | 9.796 9249 | 423   | 0.204 0088 | 9.927 8179 | 131 | 20 |    |
| 5 210.7 | 50  | 9.725 7914 | 117 | 9.796 9607 | 422   | 0.204 0047 | 9.927 8048 | 131 | 10 |    |
| 6 255.6 | 8   | 9.725 8250 | 116 | 9.796 9964 | 421   | 0.204 0106 | 9.927 7917 | 131 | 0  | 52 |
| 7 300.5 | 10  | 9.725 8587 | 117 | 9.797 0322 | 420   | 0.204 0065 | 9.927 7786 | 131 | 50 |    |
| 8 345.4 | 20  | 9.725 8923 | 116 | 9.797 0679 | 419   | 0.204 0024 | 9.927 7655 | 131 | 40 |    |
| 9 390.3 | 30  | 9.725 9260 | 117 | 9.797 1037 | 418   | 0.204 0083 | 9.927 7524 | 131 | 30 |    |
| 0 435.2 | 40  | 9.725 9596 | 116 | 9.797 1394 | 417   | 0.204 0042 | 9.927 7393 | 131 | 20 |    |
| 1 40.1  | 50  | 9.725 9933 | 117 | 9.797 1752 | 416   | 0.204 0101 | 9.927 7262 | 131 | 10 |    |
| 2 85.0  | 9   | 9.726 0269 | 116 | 9.797 2109 | 415   | 0.204 0060 | 9.927 7131 | 131 | 0  | 51 |
| 3 130.0 | 10  | 9.726 0606 | 117 | 9.797 2467 | 414   | 0.204 0019 | 9.927 7000 | 131 | 50 |    |
| 4 174.9 | 20  | 9.726 0942 | 116 | 9.797 2824 | 413   | 0.204 0078 | 9.927 6869 | 131 | 40 |    |
| 5 219.8 | 30  | 9.726 1279 | 117 | 9.797 3182 | 412   | 0.204 0037 | 9.927 6738 | 131 | 30 |    |
| 6 264.7 | 40  | 9.726 1615 | 116 | 9.797 3539 | 411   | 0.204 0096 | 9.927 6607 | 131 | 20 |    |
| 7 309.6 | 50  | 9.726 1952 | 117 | 9.797 3897 | 410   | 0.204 0055 | 9.927 6476 | 131 | 10 |    |
| 8 354.5 | 10  | 9.726 2288 | 116 | 9.797 4254 | 409   | 0.204 0114 | 9.927 6345 | 131 | 0  | 50 |
|         | 20  | 9.726 2625 | 117 | 9.797 4612 | 408   | 0.204 0073 | 9.927 6214 | 131 | 50 |    |
|         | 30  | 9.726 2961 | 116 | 9.797 4969 | 407   | 0.204 0032 | 9.927 6083 | 131 | 40 |    |
|         | 40  | 9.726 3298 | 117 | 9.797 5327 | 406   | 0.204 0091 | 9.927 5952 | 131 | 30 |    |
|         | 50  | 9.726 3634 | 116 | 9.797 5684 | 405   | 0.204 0050 | 9.927 5821 | 131 | 20 |    |
|         | 60  | 9.726 3971 | 117 | 9.797 6042 | 404   | 0.204 0109 | 9.927 5690 | 131 | 10 |    |
|         | 70  | 9.726 4307 | 116 | 9.797 6399 | 403   | 0.204 0068 | 9.927 5559 | 131 | 0  | 50 |
|         | 80  | 9.726 4644 | 117 | 9.797 6757 | 402   | 0.204 0027 | 9.927 5428 | 131 | 50 |    |
|         | 90  | 9.726 4980 | 116 | 9.797 7114 | 401   | 0.204 0086 | 9.927 5297 | 131 | 40 |    |
|         | 100 | 9.726 5317 | 117 | 9.797 7472 | 400   | 0.204 0045 | 9.927 5166 | 131 | 30 |    |
|         | 110 | 9.726 5653 | 116 | 9.797 7829 | 399   | 0.204 0104 | 9.927 5035 | 131 | 20 |    |
|         | 120 | 9.726 5990 | 117 | 9.797 8187 | 398   | 0.204 0063 | 9.927 4904 | 131 | 10 |    |
|         | 130 | 9.726 6326 | 116 | 9.797 8544 | 397   | 0.204 0022 | 9.927 4773 | 131 | 0  | 50 |
|         | 140 | 9.726 6663 | 117 | 9.797 8902 | 396   | 0.204 0081 | 9.927 4642 | 131 | 50 |    |
|         | 150 | 9.726 6999 | 116 | 9.797 9259 | 395   | 0.204 0040 | 9.927 4511 | 131 | 40 |    |
|         | 160 | 9.726 7336 | 117 | 9.797 9617 | 394   | 0.204 0099 | 9.927 4380 | 131 | 30 |    |
|         | 170 | 9.726 7672 | 116 | 9.797 9974 | 393   | 0.204 0058 | 9.927 4249 | 131 | 20 |    |
|         | 180 | 9.726 8009 | 117 | 9.798 0332 | 392   | 0.204 0117 | 9.927 4118 | 131 | 10 |    |
|         | 190 | 9.726 8345 | 116 | 9.798 0689 | 391   | 0.204 0076 | 9.927 3987 | 131 | 0  | 50 |
|         | 200 | 9.726 8682 | 117 | 9.798 1047 | 390   | 0.204 0035 | 9.927 3856 | 131 | 50 |    |
|         | 210 | 9.726 9018 | 116 | 9.798 1404 | 389   | 0.204 0094 | 9.927 3725 | 131 | 40 |    |
|         | 220 | 9.726 9355 | 117 | 9.798 1762 | 388   | 0.204 0053 | 9.927 3594 | 131 | 30 |    |
|         | 230 | 9.726 9691 | 116 | 9.798 2119 | 387   | 0.204 0112 | 9.927 3463 | 131 | 20 |    |
|         | 240 | 9.726 9928 | 117 | 9.798 2477 | 386   | 0.204 0071 | 9.927 3332 | 131 | 10 |    |
|         | 250 | 9.727 0264 | 116 | 9.798 2834 | 385   | 0.204 0030 | 9.927 3201 | 131 | 0  | 50 |
|         | 260 | 9.727 0601 | 117 | 9.798 3192 | 384   | 0.204 0089 | 9.927 3070 | 131 | 50 |    |
|         | 270 | 9.727 0937 | 116 | 9.798 3549 | 383   | 0.204 0048 | 9.927 2939 | 131 | 40 |    |
|         | 280 | 9.727 1274 | 117 | 9.798 3907 | 382   | 0.204 0107 | 9.927 2808 | 131 | 30 |    |
|         | 290 | 9.727 1610 | 116 | 9.798 4264 | 381   | 0.204 0066 | 9.927 2677 | 131 | 20 |    |
|         | 300 | 9.727 1947 | 117 | 9.798 4622 | 380   | 0.204 0025 | 9.927 2546 | 131 | 10 |    |
|         | 310 | 9.727 2283 | 116 | 9.798 4979 | 379   | 0.204 0084 | 9.927 2415 | 131 | 0  | 50 |
|         | 320 | 9.727 2620 | 117 | 9.798 5337 | 378   | 0.204 0043 | 9.927 2284 | 131 | 50 |    |
|         | 330 | 9.727 2956 | 116 | 9.798 5694 | 377   | 0.204 0102 | 9.927 2153 | 131 | 40 |    |
|         | 340 | 9.727 3293 | 117 | 9.798 6052 | 376   | 0.204 0061 | 9.927 2022 | 131 | 30 |    |
|         | 350 | 9.727 3629 | 116 | 9.798 6409 | 375   | 0.204 0020 | 9.927 1891 | 131 | 20 |    |
|         | 360 | 9.727 3966 | 117 | 9.798 6767 | 374   | 0.204 0079 | 9.927 1760 | 131 | 10 |    |
|         | 370 | 9.727 4302 | 116 | 9.798 7124 | 373   | 0.204 0038 | 9.927 1629 | 131 | 0  | 50 |
|         | 380 | 9.727 4639 | 117 | 9.798 7482 | 372   | 0.204 0097 | 9.927 1498 | 131 | 50 |    |
|         | 390 | 9.727 4975 | 116 | 9.798 7839 | 371   | 0.204 0056 | 9.927 1367 | 131 | 40 |    |
|         | 400 | 9.727 5312 | 117 | 9.798 8197 | 370   | 0.204 0015 | 9.927 1236 | 131 | 30 |    |
|         | 410 | 9.727 5648 | 116 | 9.798 8554 | 369   | 0.204 0074 | 9.927 1105 | 131 | 20 |    |
|         | 420 | 9.727 5985 | 117 | 9.798 8912 | 368   | 0.204 0033 | 9.927 0974 | 131 | 10 |    |
|         | 430 | 9.727 6321 | 116 | 9.798 9269 | 367   | 0.204 0092 | 9.927 0843 | 131 | 0  | 50 |
|         | 440 | 9.727 6658 | 117 | 9.798 9627 | 366   | 0.204 0051 | 9.927 0712 | 131 | 50 |    |
|         | 450 | 9.727 6994 | 116 | 9.798 9984 | 365   | 0.204 0010 | 9.927 0581 |     |    |    |



|    | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d.  | "  |    |
|----|----|------------|-----|------------|-------|------------|------------|-----|----|----|
| 10 | 0  | 9.726 2249 | 335 | 9.798 5964 | 467   | 0.201 4036 | 9.927 6285 | 132 | 0  | 50 |
|    | 10 | 9.726 2584 | 335 | 9.798 6431 | 467   | 0.201 3569 | 9.927 6153 | 133 | 50 |    |
|    | 20 | 9.726 2919 | 334 | 9.798 6898 | 467   | 0.201 3102 | 9.927 6020 | 132 | 40 |    |
|    | 30 | 9.726 3253 | 335 | 9.798 7365 | 467   | 0.201 2635 | 9.927 5888 | 133 | 30 |    |
|    | 40 | 9.726 3588 | 335 | 9.798 7832 | 467   | 0.201 2168 | 9.927 5755 | 133 | 20 |    |
|    | 50 | 9.726 3923 | 335 | 9.798 8300 | 468   | 0.201 1700 | 9.927 5623 | 132 | 10 |    |
| 11 | 0  | 9.726 4257 | 334 | 9.798 8767 | 467   | 0.201 1233 | 9.927 5490 | 133 | 0  | 49 |
|    | 10 | 9.726 4592 | 335 | 9.798 9234 | 467   | 0.201 0766 | 9.927 5358 | 132 | 50 |    |
|    | 20 | 9.726 4926 | 334 | 9.798 9701 | 467   | 0.201 0299 | 9.927 5225 | 133 | 40 |    |
|    | 30 | 9.726 5261 | 335 | 9.799 0168 | 467   | 0.200 9832 | 9.927 5093 | 132 | 30 |    |
|    | 40 | 9.726 5595 | 334 | 9.799 0635 | 467   | 0.200 9365 | 9.927 4960 | 133 | 20 |    |
|    | 50 | 9.726 5929 | 334 | 9.799 1102 | 467   | 0.200 8898 | 9.927 4828 | 132 | 10 |    |
| 12 | 0  | 9.726 6264 | 335 | 9.799 1569 | 467   | 0.200 8431 | 9.927 4695 | 133 | 0  | 48 |
|    | 10 | 9.726 6598 | 334 | 9.799 2036 | 467   | 0.200 7964 | 9.927 4563 | 132 | 50 |    |
|    | 20 | 9.726 6932 | 335 | 9.799 2503 | 467   | 0.200 7497 | 9.927 4430 | 133 | 40 |    |
|    | 30 | 9.726 7267 | 335 | 9.799 2969 | 466   | 0.200 7031 | 9.927 4297 | 133 | 30 |    |
|    | 40 | 9.726 7601 | 334 | 9.799 3436 | 467   | 0.200 6564 | 9.927 4165 | 132 | 20 |    |
|    | 50 | 9.726 7935 | 334 | 9.799 3903 | 467   | 0.200 6097 | 9.927 4032 | 133 | 10 |    |
| 13 | 0  | 9.726 8269 | 334 | 9.799 4370 | 467   | 0.200 5630 | 9.927 3899 | 132 | 0  | 47 |
|    | 10 | 9.726 8603 | 335 | 9.799 4837 | 467   | 0.200 5163 | 9.927 3767 | 133 | 50 |    |
|    | 20 | 9.726 8938 | 335 | 9.799 5304 | 466   | 0.200 4696 | 9.927 3634 | 133 | 40 |    |
|    | 30 | 9.726 9272 | 334 | 9.799 5770 | 466   | 0.200 4230 | 9.927 3501 | 132 | 30 |    |
|    | 40 | 9.726 9606 | 334 | 9.799 6237 | 467   | 0.200 3763 | 9.927 3369 | 133 | 20 |    |
|    | 50 | 9.726 9940 | 333 | 9.799 6704 | 466   | 0.200 3296 | 9.927 3236 | 133 | 10 |    |
| 14 | 0  | 9.727 0273 | 334 | 9.799 7170 | 467   | 0.200 2830 | 9.927 3103 | 133 | 0  | 46 |
|    | 10 | 9.727 0607 | 334 | 9.799 7637 | 467   | 0.200 2363 | 9.927 2970 | 133 | 50 |    |
|    | 20 | 9.727 0941 | 334 | 9.799 8104 | 467   | 0.200 1896 | 9.927 2837 | 133 | 40 |    |
|    | 30 | 9.727 1275 | 334 | 9.799 8570 | 466   | 0.200 1430 | 9.927 2705 | 132 | 30 |    |
|    | 40 | 9.727 1609 | 334 | 9.799 9037 | 467   | 0.200 0963 | 9.927 2572 | 133 | 20 |    |
|    | 50 | 9.727 1943 | 333 | 9.799 9504 | 466   | 0.200 0496 | 9.927 2439 | 133 | 10 |    |
| 15 | 0  | 9.727 2276 | 334 | 9.799 9970 | 467   | 0.200 0030 | 9.927 2306 | 133 | 0  | 45 |
|    | 10 | 9.727 2610 | 334 | 9.800 0437 | 466   | 0.199 9563 | 9.927 2173 | 133 | 50 |    |
|    | 20 | 9.727 2944 | 334 | 9.800 0903 | 466   | 0.199 9097 | 9.927 2040 | 132 | 40 |    |
|    | 30 | 9.727 3277 | 333 | 9.800 1370 | 467   | 0.199 8630 | 9.927 1908 | 133 | 30 |    |
|    | 40 | 9.727 3611 | 334 | 9.800 1836 | 466   | 0.199 8164 | 9.927 1775 | 133 | 20 |    |
|    | 50 | 9.727 3944 | 333 | 9.800 2303 | 466   | 0.199 7697 | 9.927 1642 | 133 | 10 |    |
| 16 | 0  | 9.727 4278 | 333 | 9.800 2769 | 467   | 0.199 7231 | 9.927 1509 | 133 | 0  | 44 |
|    | 10 | 9.727 4611 | 334 | 9.800 3236 | 466   | 0.199 6764 | 9.927 1376 | 133 | 50 |    |
|    | 20 | 9.727 4945 | 334 | 9.800 3702 | 466   | 0.199 6298 | 9.927 1243 | 133 | 40 |    |
|    | 30 | 9.727 5278 | 333 | 9.800 4168 | 466   | 0.199 5832 | 9.927 1110 | 133 | 30 |    |
|    | 40 | 9.727 5612 | 334 | 9.800 4635 | 467   | 0.199 5365 | 9.927 0977 | 133 | 20 |    |
|    | 50 | 9.727 5945 | 333 | 9.800 5101 | 466   | 0.199 4899 | 9.927 0844 | 133 | 10 |    |
| 17 | 0  | 9.727 6278 | 333 | 9.800 5567 | 467   | 0.199 4433 | 9.927 0711 | 133 | 0  | 43 |
|    | 10 | 9.727 6611 | 334 | 9.800 6034 | 466   | 0.199 3966 | 9.927 0578 | 133 | 50 |    |
|    | 20 | 9.727 6945 | 334 | 9.800 6500 | 466   | 0.199 3500 | 9.927 0445 | 133 | 40 |    |
|    | 30 | 9.727 7278 | 333 | 9.800 6966 | 466   | 0.199 3034 | 9.927 0312 | 133 | 30 |    |
|    | 40 | 9.727 7611 | 333 | 9.800 7432 | 466   | 0.199 2568 | 9.927 0179 | 133 | 20 |    |
|    | 50 | 9.727 7944 | 333 | 9.800 7898 | 466   | 0.199 2102 | 9.927 0046 | 133 | 10 |    |
| 18 | 0  | 9.727 8277 | 333 | 9.800 8365 | 467   | 0.199 1635 | 9.926 9913 | 134 | 0  | 42 |
|    | 10 | 9.727 8610 | 333 | 9.800 8831 | 466   | 0.199 1169 | 9.926 9779 | 133 | 50 |    |
|    | 20 | 9.727 8943 | 333 | 9.800 9297 | 466   | 0.199 0703 | 9.926 9646 | 133 | 40 |    |
|    | 30 | 9.727 9276 | 333 | 9.800 9763 | 466   | 0.199 0237 | 9.926 9513 | 133 | 30 |    |
|    | 40 | 9.727 9609 | 333 | 9.801 0229 | 466   | 0.198 9771 | 9.926 9380 | 133 | 20 |    |
|    | 50 | 9.727 9942 | 333 | 9.801 0695 | 466   | 0.198 9305 | 9.926 9247 | 133 | 10 |    |
| 19 | 0  | 9.728 0275 | 333 | 9.801 1161 | 466   | 0.198 8839 | 9.926 9114 | 133 | 0  | 41 |
|    | 10 | 9.728 0608 | 333 | 9.801 1627 | 466   | 0.198 8373 | 9.926 8981 | 134 | 50 |    |
|    | 20 | 9.728 0941 | 333 | 9.801 2093 | 466   | 0.198 7907 | 9.926 8847 | 133 | 40 |    |
|    | 30 | 9.728 1273 | 333 | 9.801 2559 | 466   | 0.198 7441 | 9.926 8714 | 133 | 30 |    |
|    | 40 | 9.728 1606 | 333 | 9.801 3025 | 466   | 0.198 6975 | 9.926 8581 | 133 | 20 |    |
|    | 50 | 9.728 1939 | 332 | 9.801 3491 | 466   | 0.198 6509 | 9.926 8448 | 134 | 10 |    |
| 20 | 0  | 9.728 2271 | 332 | 9.801 3957 | 466   | 0.198 6043 | 9.926 8314 | 134 | 0  | 40 |
|    | "  | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d.  | "  | "  |

467

1 46.7

2 93.4

3 140.1

4 186.8

5 233.5

6 280.2

7 326.9

8 373.6

9 420.3

466

1 46.6

2 93.2

3 139.8

4 186.4

5 233.0

6 279.6

7 326.2

8 372.8

9 419.4

335

1 33.5

2 67.0

3 100.5

4 134.0

5 167.5

6 201.0

7 234.5

8 268.0

9 301.5

334

1 33.4

2 66.8

3 100.2

4 133.6

5 167.0

6 200.4

7 233.8

8 267.2

9 300.6

333

1 33.3

2 66.6

3 99.9

4 133.2

5 166.5

6 199.8

7 233.1

8 266.4

9 299.7

183

1 13.3

2 26.6

3 39.9

4 53.2

5 66.5

6 79.8

7 93.1

8 106.4

9 119.7



|    | n  | Sh         | d.  | Tang       | d. c. | Cutg        | Con         | d.  | n  |    |
|----|----|------------|-----|------------|-------|-------------|-------------|-----|----|----|
| 20 | 0  | 9.728 1271 | 311 | 9.801 1957 | 366   | 0.193 6.333 | 9.926 8.134 | 133 | 0  | 40 |
|    | 10 | 9.728 1263 | 311 | 9.801 1944 | 366   | 0.193 6.333 | 9.926 8.134 | 133 | 50 |    |
|    | 20 | 9.728 1937 | 311 | 9.801 1959 | 366   | 0.193 6.333 | 9.926 8.134 | 133 | 40 |    |
|    | 30 | 9.728 1269 | 311 | 9.801 1945 | 366   | 0.193 6.333 | 9.926 8.134 | 133 | 30 |    |
|    | 40 | 9.728 1263 | 311 | 9.801 1945 | 366   | 0.193 6.333 | 9.926 8.134 | 133 | 20 |    |
|    | 50 | 9.728 1941 | 311 | 9.801 1946 | 366   | 0.193 6.333 | 9.926 8.134 | 133 | 10 |    |
| 21 | 0  | 9.728 1269 | 311 | 9.801 1945 | 366   | 0.193 6.333 | 9.926 8.134 | 133 | 0  | 39 |
|    | 10 | 9.728 1269 | 311 | 9.801 1945 | 366   | 0.193 6.333 | 9.926 8.134 | 133 | 50 |    |
|    | 20 | 9.728 1269 | 311 | 9.801 1945 | 366   | 0.193 6.333 | 9.926 8.134 | 133 | 40 |    |
|    | 30 | 9.728 1269 | 311 | 9.801 1945 | 366   | 0.193 6.333 | 9.926 8.134 | 133 | 30 |    |
|    | 40 | 9.728 1269 | 311 | 9.801 1945 | 366   | 0.193 6.333 | 9.926 8.134 | 133 | 20 |    |
|    | 50 | 9.728 1269 | 311 | 9.801 1945 | 366   | 0.193 6.333 | 9.926 8.134 | 133 | 10 |    |
| 22 | 0  | 9.728 1269 | 311 | 9.801 1945 | 366   | 0.193 6.333 | 9.926 8.134 | 133 | 0  | 38 |
|    | 10 | 9.728 1269 | 311 | 9.801 1945 | 366   | 0.193 6.333 | 9.926 8.134 | 133 | 50 |    |
|    | 20 | 9.728 1269 | 311 | 9.801 1945 | 366   | 0.193 6.333 | 9.926 8.134 | 133 | 40 |    |
|    | 30 | 9.728 1269 | 311 | 9.801 1945 | 366   | 0.193 6.333 | 9.926 8.134 | 133 | 30 |    |
|    | 40 | 9.728 1269 | 311 | 9.801 1945 | 366   | 0.193 6.333 | 9.926 8.134 | 133 | 20 |    |
|    | 50 | 9.728 1269 | 311 | 9.801 1945 | 366   | 0.193 6.333 | 9.926 8.134 | 133 | 10 |    |
| 23 | 0  | 9.728 1269 | 311 | 9.801 1945 | 366   | 0.193 6.333 | 9.926 8.134 | 133 | 0  | 37 |
|    | 10 | 9.728 1269 | 311 | 9.801 1945 | 366   | 0.193 6.333 | 9.926 8.134 | 133 | 50 |    |
|    | 20 | 9.728 1269 | 311 | 9.801 1945 | 366   | 0.193 6.333 | 9.926 8.134 | 133 | 40 |    |
|    | 30 | 9.728 1269 | 311 | 9.801 1945 | 366   | 0.193 6.333 | 9.926 8.134 | 133 | 30 |    |
|    | 40 | 9.728 1269 | 311 | 9.801 1945 | 366   | 0.193 6.333 | 9.926 8.134 | 133 | 20 |    |
|    | 50 | 9.728 1269 | 311 | 9.801 1945 | 366   | 0.193 6.333 | 9.926 8.134 | 133 | 10 |    |
| 24 | 0  | 9.728 1269 | 311 | 9.801 1945 | 366   | 0.193 6.333 | 9.926 8.134 | 133 | 0  | 36 |
|    | 10 | 9.728 1269 | 311 | 9.801 1945 | 366   | 0.193 6.333 | 9.926 8.134 | 133 | 50 |    |
|    | 20 | 9.728 1269 | 311 | 9.801 1945 | 366   | 0.193 6.333 | 9.926 8.134 | 133 | 40 |    |
|    | 30 | 9.728 1269 | 311 | 9.801 1945 | 366   | 0.193 6.333 | 9.926 8.134 | 133 | 30 |    |
|    | 40 | 9.728 1269 | 311 | 9.801 1945 | 366   | 0.193 6.333 | 9.926 8.134 | 133 | 20 |    |
|    | 50 | 9.728 1269 | 311 | 9.801 1945 | 366   | 0.193 6.333 | 9.926 8.134 | 133 | 10 |    |
| 25 | 0  | 9.728 1269 | 311 | 9.801 1945 | 366   | 0.193 6.333 | 9.926 8.134 | 133 | 0  | 35 |
|    | 10 | 9.728 1269 | 311 | 9.801 1945 | 366   | 0.193 6.333 | 9.926 8.134 | 133 | 50 |    |
|    | 20 | 9.728 1269 | 311 | 9.801 1945 | 366   | 0.193 6.333 | 9.926 8.134 | 133 | 40 |    |
|    | 30 | 9.728 1269 | 311 | 9.801 1945 | 366   | 0.193 6.333 | 9.926 8.134 | 133 | 30 |    |
|    | 40 | 9.728 1269 | 311 | 9.801 1945 | 366   | 0.193 6.333 | 9.926 8.134 | 133 | 20 |    |



| i  | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Con        | d.  | "  | i       |
|----|----|------------|-----|------------|-------|------------|------------|-----|----|---------|
| 30 | 0  | 9.730 2165 | 331 | 9.804 1873 | 465   | 0.195 8127 | 9.926 0192 | 134 | 0  | 30      |
|    | 10 | 9.730 2496 | 330 | 9.804 2338 | 465   | 0.195 7662 | 9.926 0158 | 134 | 50 | 464     |
|    | 20 | 9.730 2826 | 331 | 9.804 2803 | 464   | 0.195 7197 | 9.926 0024 | 135 | 40 | 1 46.4  |
|    | 30 | 9.730 3157 | 330 | 9.804 3267 | 464   | 0.195 6733 | 9.925 9889 | 135 | 30 | 2 92.8  |
|    | 40 | 9.730 3487 | 330 | 9.804 3732 | 465   | 0.195 6268 | 9.925 9755 | 134 | 20 | 3 139.2 |
|    | 50 | 9.730 3817 | 330 | 9.804 4196 | 464   | 0.195 5804 | 9.925 9621 | 134 | 10 | 4 185.6 |
| 31 | 0  | 9.730 4148 | 331 | 9.804 4661 | 465   | 0.195 5339 | 9.925 9487 | 134 | 0  | 5 232.0 |
|    | 10 | 9.730 4478 | 330 | 9.804 5125 | 464   | 0.195 4875 | 9.925 9353 | 135 | 50 | 6 278.4 |
|    | 20 | 9.730 4808 | 330 | 9.804 5590 | 464   | 0.195 4410 | 9.925 9218 | 135 | 40 | 7 324.8 |
|    | 30 | 9.730 5138 | 330 | 9.804 6054 | 464   | 0.195 3946 | 9.925 9084 | 134 | 30 | 8 371.2 |
|    | 40 | 9.730 5468 | 331 | 9.804 6519 | 464   | 0.195 3481 | 9.925 8950 | 134 | 20 | 9 417.6 |
|    | 50 | 9.730 5799 | 330 | 9.804 6983 | 464   | 0.195 3017 | 9.925 8816 | 135 | 10 |         |
| 32 | 0  | 9.730 6129 | 330 | 9.804 7447 | 465   | 0.195 2553 | 9.925 8681 | 134 | 0  | 463     |
|    | 10 | 9.730 6459 | 330 | 9.804 7912 | 464   | 0.195 2088 | 9.925 8547 | 134 | 50 | 1 46.3  |
|    | 20 | 9.730 6789 | 330 | 9.804 8376 | 464   | 0.195 1624 | 9.925 8413 | 135 | 40 | 2 92.8  |
|    | 30 | 9.730 7119 | 330 | 9.804 8841 | 465   | 0.195 1159 | 9.925 8278 | 135 | 30 | 3 139.2 |
|    | 40 | 9.730 7449 | 330 | 9.804 9305 | 464   | 0.195 0695 | 9.925 8144 | 134 | 20 | 4 185.6 |
|    | 50 | 9.730 7779 | 330 | 9.804 9769 | 464   | 0.195 0231 | 9.925 8010 | 135 | 10 | 5 232.0 |
| 33 | 0  | 9.730 8109 | 329 | 9.805 0233 | 464   | 0.194 9767 | 9.925 7875 | 135 | 0  | 6 278.4 |
|    | 10 | 9.730 8438 | 330 | 9.805 0698 | 465   | 0.194 9302 | 9.925 7741 | 134 | 50 | 7 324.8 |
|    | 20 | 9.730 8768 | 330 | 9.805 1162 | 464   | 0.194 8838 | 9.925 7606 | 135 | 40 | 8 371.2 |
|    | 30 | 9.730 9098 | 330 | 9.805 1626 | 464   | 0.194 8374 | 9.925 7472 | 135 | 30 | 9 417.6 |
|    | 40 | 9.730 9428 | 330 | 9.805 2090 | 464   | 0.194 7910 | 9.925 7337 | 134 | 20 |         |
|    | 50 | 9.730 9757 | 329 | 9.805 2554 | 465   | 0.194 7446 | 9.925 7203 | 134 | 10 | 330     |
| 34 | 0  | 9.731 0087 | 330 | 9.805 3019 | 464   | 0.194 6981 | 9.925 7069 | 135 | 0  | 1 33.0  |
|    | 10 | 9.731 0417 | 329 | 9.805 3483 | 464   | 0.194 6517 | 9.925 6934 | 135 | 50 | 2 66.0  |
|    | 20 | 9.731 0746 | 330 | 9.805 3947 | 464   | 0.194 6053 | 9.925 6800 | 134 | 40 | 3 99.0  |
|    | 30 | 9.731 1076 | 329 | 9.805 4411 | 464   | 0.194 5589 | 9.925 6665 | 135 | 30 | 4 132.0 |
|    | 40 | 9.731 1405 | 329 | 9.805 4875 | 464   | 0.194 5125 | 9.925 6530 | 135 | 20 | 5 165.0 |
|    | 50 | 9.731 1735 | 329 | 9.805 5339 | 464   | 0.194 4661 | 9.925 6396 | 134 | 10 | 6 198.0 |
| 35 | 0  | 9.731 2064 | 330 | 9.805 5803 | 464   | 0.194 4197 | 9.925 6261 | 134 | 0  | 7 231.0 |
|    | 10 | 9.731 2394 | 329 | 9.805 6267 | 464   | 0.194 3733 | 9.925 6127 | 135 | 50 | 8 264.0 |
|    | 20 | 9.731 2723 | 330 | 9.805 6731 | 464   | 0.194 3269 | 9.925 5992 | 134 | 40 | 9 297.0 |
|    | 30 | 9.731 3053 | 329 | 9.805 7195 | 464   | 0.194 2805 | 9.925 5858 | 135 | 30 |         |
|    | 40 | 9.731 3382 | 329 | 9.805 7659 | 464   | 0.194 2341 | 9.925 5723 | 135 | 20 | 329     |
|    | 50 | 9.731 3711 | 329 | 9.805 8123 | 464   | 0.194 1877 | 9.925 5588 | 134 | 10 | 1 32.0  |
| 36 | 0  | 9.731 4040 | 330 | 9.805 8587 | 464   | 0.194 1413 | 9.925 5454 | 135 | 0  | 2 65.0  |
|    | 10 | 9.731 4370 | 329 | 9.805 9051 | 463   | 0.194 0949 | 9.925 5319 | 135 | 50 | 3 98.0  |
|    | 20 | 9.731 4699 | 329 | 9.805 9514 | 463   | 0.194 0486 | 9.925 5184 | 134 | 40 | 4 131.6 |
|    | 30 | 9.731 5028 | 329 | 9.805 9978 | 463   | 0.194 0022 | 9.925 5050 | 135 | 30 | 5 164.5 |
|    | 40 | 9.731 5357 | 329 | 9.806 0442 | 464   | 0.193 9558 | 9.925 4915 | 135 | 20 | 6 197.4 |
|    | 50 | 9.731 5686 | 329 | 9.806 0906 | 464   | 0.193 9094 | 9.925 4780 | 134 | 10 | 7 230.3 |
| 37 | 0  | 9.731 6015 | 329 | 9.806 1370 | 463   | 0.193 8630 | 9.925 4646 | 135 | 0  | 8 263.2 |
|    | 10 | 9.731 6344 | 329 | 9.806 1833 | 464   | 0.193 8167 | 9.925 4511 | 135 | 50 | 9 296.1 |
|    | 20 | 9.731 6673 | 329 | 9.806 2297 | 464   | 0.193 7703 | 9.925 4376 | 135 | 40 |         |
|    | 30 | 9.731 7002 | 329 | 9.806 2761 | 464   | 0.193 7239 | 9.925 4241 | 135 | 30 | 134     |
|    | 40 | 9.731 7331 | 329 | 9.806 3224 | 463   | 0.193 6776 | 9.925 4106 | 134 | 20 | 1 13.4  |
|    | 50 | 9.731 7660 | 329 | 9.806 3688 | 464   | 0.193 6312 | 9.925 3972 | 135 | 10 | 2 26.8  |
| 38 | 0  | 9.731 7989 | 328 | 9.806 4152 | 463   | 0.193 5848 | 9.925 3837 | 135 | 0  | 3 40.2  |
|    | 10 | 9.731 8317 | 329 | 9.806 4615 | 464   | 0.193 5385 | 9.925 3702 | 135 | 50 | 4 53.6  |
|    | 20 | 9.731 8646 | 329 | 9.806 5079 | 464   | 0.193 4921 | 9.925 3567 | 135 | 40 | 5 67.0  |
|    | 30 | 9.731 8975 | 329 | 9.806 5543 | 464   | 0.193 4457 | 9.925 3432 | 135 | 30 | 6 80.4  |
|    | 40 | 9.731 9304 | 328 | 9.806 6006 | 464   | 0.193 3994 | 9.925 3297 | 134 | 20 | 7 93.8  |
|    | 50 | 9.731 9632 | 329 | 9.806 6470 | 463   | 0.193 3530 | 9.925 3163 | 135 | 10 | 8 107.2 |
| 39 | 0  | 9.731 9961 | 328 | 9.806 6933 | 464   | 0.193 3067 | 9.925 3028 | 135 | 0  | 9 120.6 |
|    | 10 | 9.732 0289 | 329 | 9.806 7397 | 463   | 0.193 2603 | 9.925 2893 | 135 | 50 |         |
|    | 20 | 9.732 0618 | 328 | 9.806 7860 | 464   | 0.193 2140 | 9.925 2758 | 135 | 40 | 135     |
|    | 30 | 9.732 0946 | 329 | 9.806 8324 | 463   | 0.193 1676 | 9.925 2623 | 135 | 30 | 1 23.5  |
|    | 40 | 9.732 1275 | 328 | 9.806 8787 | 464   | 0.193 1213 | 9.925 2488 | 135 | 20 | 2 27.0  |
|    | 50 | 9.732 1603 | 329 | 9.806 9251 | 463   | 0.193 0749 | 9.925 2353 | 135 | 10 | 3 40.5  |
| 40 | 0  | 9.732 1932 | 329 | 9.806 9714 | 463   | 0.193 0286 | 9.925 2218 | 135 | 0  | 4 54.0  |
|    |    |            |     |            |       |            |            |     |    | 5 67.5  |
|    |    |            |     |            |       |            |            |     |    | 6 81.0  |
|    |    |            |     |            |       |            |            |     |    | 7 94.5  |
|    |    |            |     |            |       |            |            |     |    | 8 108.0 |
|    |    |            |     |            |       |            |            |     |    | 9 121.5 |
| i  | "  | Con        | d.  | Cotg       | d. c. | Tang       | Con        | d.  | "  | i       |



|     |    | 8in        | d.  | Temp       | d. c. | Cutg       | Co.        | d.  |    |
|-----|----|------------|-----|------------|-------|------------|------------|-----|----|
| 464 | 0  | 9.712 1912 | 128 | 9.806 9714 | 464   | 0.191 0286 | 9.925 2218 | 135 | 0  |
|     | 10 | 9.712 2260 | 129 | 9.807 0077 | 464   | 0.192 0521 | 9.925 2381 | 135 | 50 |
|     | 20 | 9.712 2580 | 128 | 9.807 0611 | 464   | 0.192 0759 | 9.925 2548 | 135 | 40 |
|     | 30 | 9.712 2917 | 128 | 9.807 1101 | 464   | 0.192 1000 | 9.925 2813 | 135 | 30 |
|     | 40 | 9.712 3245 | 128 | 9.807 1567 | 464   | 0.192 1244 | 9.925 3088 | 135 | 20 |
| 465 | 0  | 9.712 3571 | 129 | 9.807 2011 | 464   | 0.192 1494 | 9.925 3344 | 135 | 10 |
|     | 10 | 9.712 3911 | 128 | 9.807 2491 | 464   | 0.192 1741 | 9.925 3608 | 135 | 0  |
|     | 20 | 9.712 4240 | 128 | 9.807 2957 | 464   | 0.192 1981 | 9.925 3871 | 135 | 50 |
|     | 30 | 9.712 4558 | 128 | 9.807 3420 | 464   | 0.192 2221 | 9.925 4137 | 135 | 40 |
|     | 40 | 9.712 4880 | 128 | 9.807 3884 | 464   | 0.192 2466 | 9.925 4402 | 135 | 30 |
| 466 | 0  | 9.712 5214 | 128 | 9.807 4347 | 464   | 0.192 2705 | 9.925 4667 | 135 | 20 |
|     | 10 | 9.712 5543 | 128 | 9.807 4810 | 464   | 0.192 2949 | 9.925 4932 | 135 | 10 |
|     | 20 | 9.712 5870 | 128 | 9.807 5271 | 464   | 0.192 3187 | 9.925 5197 | 135 | 0  |
|     | 30 | 9.712 6198 | 128 | 9.807 5730 | 464   | 0.192 3424 | 9.925 5462 | 136 | 50 |
|     | 40 | 9.712 6526 | 128 | 9.807 6189 | 464   | 0.192 3661 | 9.925 5727 | 136 | 40 |
| 467 | 0  | 9.712 6854 | 128 | 9.807 6648 | 464   | 0.192 3895 | 9.925 5992 | 135 | 30 |
|     | 10 | 9.712 7182 | 128 | 9.807 7107 | 464   | 0.192 4134 | 9.925 6257 | 135 | 20 |
|     | 20 | 9.712 7509 | 127 | 9.807 7566 | 464   | 0.192 4372 | 9.925 6522 | 135 | 10 |
|     | 30 | 9.712 7837 | 128 | 9.807 8025 | 464   | 0.192 4611 | 9.925 6787 | 136 | 0  |
|     | 40 | 9.712 8165 | 128 | 9.807 8484 | 464   | 0.192 4849 | 9.925 7052 | 136 | 50 |
| 468 | 0  | 9.712 8493 | 128 | 9.807 8943 | 464   | 0.192 5088 | 9.925 7317 | 135 | 40 |
|     | 10 | 9.712 8821 | 127 | 9.807 9402 | 464   | 0.192 5326 | 9.925 7582 | 135 | 30 |
|     | 20 | 9.712 9149 | 128 | 9.807 9861 | 464   | 0.192 5565 | 9.925 7847 | 135 | 20 |
|     | 30 | 9.712 9477 | 128 | 9.808 0320 | 464   | 0.192 5803 | 9.925 8112 | 135 | 10 |
|     | 40 | 9.712 9805 | 127 | 9.808 0779 | 464   | 0.192 6042 | 9.925 8377 | 135 | 0  |
| 469 | 0  | 9.713 0133 | 127 | 9.808 1238 | 464   | 0.192 6280 | 9.925 8642 | 135 | 50 |
|     | 10 | 9.713 0461 | 127 | 9.808 1697 | 464   | 0.192 6519 | 9.925 8907 | 135 | 40 |
|     | 20 | 9.713 0789 | 128 | 9.808 2156 | 464   | 0.192 6757 | 9.925 9172 | 135 | 30 |
|     | 30 | 9.713 1117 | 128 | 9.808 2615 | 464   | 0.192 6996 | 9.925 9437 | 135 | 20 |
|     | 40 | 9.713 1445 | 127 | 9.808 3074 | 464   | 0.192 7234 | 9.925 9702 | 135 | 10 |
| 470 | 0  | 9.713 1773 | 127 | 9.808 3533 | 464   | 0.192 7473 | 9.925 9967 | 135 | 0  |
|     | 10 | 9.713 2101 | 127 | 9.808 3992 | 464   | 0.192 7711 | 9.926 0232 | 135 | 50 |
|     | 20 | 9.713 2429 | 127 | 9.808 4451 | 464   | 0.192 7950 | 9.926 0497 | 135 | 40 |
|     | 30 | 9.713 2757 | 127 | 9.808 4910 | 464   | 0.192 8188 | 9.926 0762 | 135 | 30 |
|     | 40 | 9.713 3085 | 127 | 9.808 5369 | 464   | 0.192 8427 | 9.926 1027 | 135 | 20 |
| 471 | 0  | 9.713 3413 | 127 | 9.808 5828 | 464   | 0.192 8665 | 9.926 1292 | 135 | 10 |
|     | 10 | 9.713 3741 | 127 | 9.808 6287 | 464   | 0.192 8904 | 9.926 1557 | 135 | 0  |
|     | 20 | 9.713 4069 | 127 | 9.808 6746 | 464   | 0.192 9142 | 9.926 1822 | 135 | 50 |
|     | 30 | 9.713 4397 | 127 | 9.808 7205 | 464   | 0.192 9381 | 9.926 2087 | 135 | 40 |
|     | 40 | 9.713 4725 | 127 | 9.808 7664 | 464   | 0.192 9619 | 9.926 2352 | 135 | 30 |
| 472 | 0  | 9.713 5053 | 127 | 9.808 8123 | 464   | 0.192 9858 | 9.926 2617 | 135 | 20 |
|     | 10 | 9.713 5381 | 127 | 9.808 8582 | 464   | 0.193 0096 | 9.926 2882 | 135 | 10 |
|     | 20 | 9.713 5709 | 127 | 9.808 9041 | 464   | 0.193 0335 | 9.926 3147 | 135 | 0  |
|     | 30 | 9.713 6037 | 127 | 9.808 9500 | 464   | 0.193 0573 | 9.926 3412 | 135 | 50 |
|     | 40 | 9.713 6365 | 127 | 9.809 0000 | 464   | 0.193 0812 | 9.926 3677 | 135 | 40 |
| 473 | 0  | 9.713 6693 | 127 | 9.809 0459 | 464   | 0.193 1050 | 9.926 3942 | 135 | 30 |
|     | 10 | 9.713 7021 | 127 | 9.809 0918 | 464   | 0.193 1289 | 9.926 4207 | 135 | 20 |
|     | 20 | 9.713 7349 | 127 | 9.809 1377 | 464   | 0.193 1527 | 9.926 4472 | 135 | 10 |
|     | 30 | 9.713 7677 | 127 | 9.809 1836 | 464   | 0.193 1766 | 9.926 4737 | 135 | 0  |
|     | 40 | 9.713 7995 | 127 | 9.809 2295 | 464   | 0.193 2004 | 9.926 5002 | 135 | 50 |
| 474 | 0  | 9.713 8323 | 127 | 9.809 2754 | 464   | 0.193 2243 | 9.926 5267 | 135 | 40 |
|     | 10 | 9.713 8651 | 127 | 9.809 3213 | 464   | 0.193 2481 | 9.926 5532 | 135 | 30 |
|     | 20 | 9.713 8979 | 127 | 9.809 3672 | 464   | 0.193 2720 | 9.926 5797 | 135 | 20 |
|     | 30 | 9.713 9307 | 127 | 9.809 4131 | 464   | 0.193 2958 | 9.926 6062 | 135 | 10 |
|     | 40 | 9.713 9635 | 127 | 9.809 4590 | 464   | 0.193 3197 | 9.926 6327 | 135 | 0  |
| 475 | 0  | 9.713 9963 | 127 | 9.809 5049 | 464   | 0.193 3435 | 9.926 6592 | 135 | 50 |
|     | 10 | 9.714 0291 | 127 | 9.809 5508 | 464   | 0.193 3674 | 9.926 6857 | 135 | 40 |
|     | 20 | 9.714 0619 | 127 | 9.809 5967 | 464   | 0.193 3912 | 9.926 7122 | 135 | 30 |
|     | 30 | 9.714 0947 | 127 | 9.809 6426 | 464   | 0.193 4151 | 9.926 7387 | 135 | 20 |
|     | 40 | 9.714 1275 | 127 | 9.809 6885 | 464   | 0.193 4389 | 9.926 7652 | 135 | 10 |
| 476 | 0  | 9.714 1603 | 127 | 9.809 7344 | 464   | 0.193 4628 | 9.926 7917 | 135 | 0  |
|     | 10 | 9.714 1931 | 127 | 9.809 7803 | 464   | 0.193 4866 | 9.926 8182 | 135 | 50 |
|     | 20 | 9.714 2259 | 127 | 9.809 8262 | 464   | 0.193 5105 | 9.926 8447 | 135 | 40 |
|     | 30 | 9.714 2587 | 127 | 9.809 8721 | 464   | 0.193 5343 | 9.926 8712 | 135 | 30 |
|     | 40 | 9.714 2915 | 127 | 9.809 9180 | 464   | 0.193 5582 | 9.926 8977 | 135 | 20 |
| 477 | 0  | 9.714 3243 | 127 | 9.809 9639 | 464   | 0.193 5820 | 9.926 9242 | 135 | 10 |
|     | 10 | 9.714 3571 | 127 | 9.810 0098 | 464   | 0.193 6059 | 9.926 9507 | 135 | 0  |
|     | 20 | 9.714 3899 | 127 | 9.810 0557 | 464   | 0.193 6297 | 9.926 9772 | 135 | 50 |
|     | 30 | 9.714 4227 | 127 | 9.810 1016 | 464   | 0.193 6536 | 9.927 0037 | 135 | 40 |
|     | 40 | 9.714 4555 | 127 | 9.810 1475 | 464   | 0.193 6774 | 9.927 0302 | 135 | 30 |
| 478 | 0  | 9.714 4883 | 127 | 9.810 1934 | 464   | 0.193 7013 | 9.927 0567 | 135 | 20 |
|     | 10 | 9.714 5211 | 127 | 9.810 2393 | 464   | 0.193 7251 | 9.927 0832 | 135 | 10 |
|     | 20 | 9.714 5539 | 127 | 9.810 2852 | 464   | 0.193 7490 | 9.927 1097 | 135 | 0  |
|     | 30 | 9.714 5867 | 127 | 9.810 3311 | 464   | 0.193 7728 | 9.927 1362 | 135 | 50 |
|     | 40 | 9.714 6195 | 127 | 9.810 3770 | 464   | 0.193 7967 | 9.927 1627 | 135 | 40 |
| 479 | 0  | 9.714 6523 | 127 | 9.810 4229 | 464   | 0.193 8205 | 9.927 1892 | 135 | 30 |
|     | 10 | 9.714 6851 | 127 | 9.810 4688 | 464   | 0.193 8444 | 9.927 2157 | 135 | 20 |
|     | 20 | 9.714 7179 | 127 | 9.810 5147 | 464   | 0.193 8682 | 9.927 2422 | 135 | 10 |
|     | 30 | 9.714 7507 | 127 | 9.810 5606 | 464   | 0.193 8921 | 9.927 2687 | 135 | 0  |
|     | 40 | 9.714 7835 | 127 | 9.810 6065 | 464   | 0.193 9159 | 9.927 2952 | 135 | 50 |
| 480 | 0  | 9.714 8163 | 127 | 9.810 6524 | 464   | 0.193 9398 | 9.927 3217 | 135 | 40 |
|     | 10 | 9.714 8491 | 127 | 9.810 6983 | 464   | 0.193 9636 | 9.927 3482 | 135 | 30 |
|     | 20 | 9.714 8819 | 127 | 9.810 7442 | 464   | 0.193 9875 | 9.927 3747 | 135 | 20 |
|     | 30 | 9.714 9147 | 127 | 9.810 7901 | 464   | 0.194 0113 | 9.927 4012 | 135 | 10 |
|     | 40 | 9.714 9475 | 127 | 9.810 8360 | 464   | 0.194 0352 | 9.927 4277 | 135 | 0  |



|    | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d.  | "  |    |
|----|----|------------|-----|------------|-------|------------|------------|-----|----|----|
| 50 | 0  | 9.734 1572 | 327 | 9.809 7480 | 462   | 0.190 2520 | 9.924 4092 | 136 | 0  | 10 |
|    | 10 | 9.734 1899 | 326 | 9.809 7942 | 463   | 0.190 2058 | 9.924 3956 | 136 | 50 |    |
|    | 20 | 9.734 2225 | 326 | 9.809 8405 | 462   | 0.190 1595 | 9.924 3820 | 136 | 40 |    |
|    | 30 | 9.734 2551 | 326 | 9.809 8867 | 462   | 0.190 1133 | 9.924 3684 | 136 | 30 |    |
|    | 40 | 9.734 2877 | 326 | 9.809 9329 | 462   | 0.190 0671 | 9.924 3548 | 136 | 20 |    |
|    | 50 | 9.734 3203 | 326 | 9.809 9791 | 462   | 0.190 0209 | 9.924 3412 | 135 | 10 |    |
| 51 | 0  | 9.734 3529 | 326 | 9.810 0253 | 462   | 0.189 9747 | 9.924 3277 | 136 | 0  | 9  |
|    | 10 | 9.734 3855 | 326 | 9.810 0715 | 462   | 0.189 9285 | 9.924 3141 | 136 | 50 |    |
|    | 20 | 9.734 4181 | 326 | 9.810 1177 | 462   | 0.189 8823 | 9.924 3005 | 136 | 40 |    |
|    | 30 | 9.734 4507 | 326 | 9.810 1639 | 462   | 0.189 8361 | 9.924 2869 | 136 | 30 |    |
|    | 40 | 9.734 4833 | 326 | 9.810 2101 | 462   | 0.189 7899 | 9.924 2733 | 136 | 20 |    |
|    | 50 | 9.734 5159 | 326 | 9.810 2563 | 462   | 0.189 7437 | 9.924 2597 | 136 | 10 |    |
| 52 | 0  | 9.734 5485 | 326 | 9.810 3025 | 462   | 0.189 6975 | 9.924 2461 | 136 | 0  | 8  |
|    | 10 | 9.734 5811 | 326 | 9.810 3487 | 462   | 0.189 6513 | 9.924 2325 | 137 | 50 |    |
|    | 20 | 9.734 6137 | 326 | 9.810 3949 | 461   | 0.189 6051 | 9.924 2188 | 136 | 40 |    |
|    | 30 | 9.734 6463 | 326 | 9.810 4410 | 462   | 0.189 5590 | 9.924 2052 | 136 | 30 |    |
|    | 40 | 9.734 6789 | 325 | 9.810 4872 | 462   | 0.189 5128 | 9.924 1916 | 136 | 20 |    |
|    | 50 | 9.734 7114 | 325 | 9.810 5334 | 462   | 0.189 4666 | 9.924 1780 | 136 | 10 |    |
| 53 | 0  | 9.734 7440 | 326 | 9.810 5796 | 462   | 0.189 4204 | 9.924 1644 | 136 | 0  | 7  |
|    | 10 | 9.734 7766 | 325 | 9.810 6258 | 461   | 0.189 3742 | 9.924 1508 | 136 | 50 |    |
|    | 20 | 9.734 8091 | 326 | 9.810 6719 | 462   | 0.189 3281 | 9.924 1372 | 136 | 40 |    |
|    | 30 | 9.734 8417 | 325 | 9.810 7181 | 462   | 0.189 2819 | 9.924 1236 | 137 | 30 |    |
|    | 40 | 9.734 8742 | 326 | 9.810 7643 | 462   | 0.189 2357 | 9.924 1099 | 136 | 20 |    |
|    | 50 | 9.734 9068 | 325 | 9.810 8105 | 461   | 0.189 1895 | 9.924 0963 | 136 | 10 |    |
| 54 | 0  | 9.734 9393 | 326 | 9.810 8566 | 462   | 0.189 1434 | 9.924 0827 | 136 | 0  | 6  |
|    | 10 | 9.734 9719 | 325 | 9.810 9028 | 462   | 0.189 0972 | 9.924 0691 | 136 | 50 |    |
|    | 20 | 9.735 0044 | 326 | 9.810 9490 | 461   | 0.189 0510 | 9.924 0555 | 137 | 40 |    |
|    | 30 | 9.735 0370 | 325 | 9.810 9951 | 462   | 0.189 0049 | 9.924 0418 | 136 | 30 |    |
|    | 40 | 9.735 0695 | 325 | 9.811 0413 | 461   | 0.188 9587 | 9.924 0282 | 136 | 20 |    |
|    | 50 | 9.735 1020 | 325 | 9.811 0874 | 462   | 0.188 9126 | 9.924 0146 | 136 | 10 |    |
| 55 | 0  | 9.735 1345 | 326 | 9.811 1336 | 462   | 0.188 8664 | 9.924 0010 | 137 | 0  | 5  |
|    | 10 | 9.735 1671 | 325 | 9.811 1798 | 461   | 0.188 8202 | 9.923 9873 | 136 | 50 |    |
|    | 20 | 9.735 1996 | 325 | 9.811 2259 | 462   | 0.188 7741 | 9.923 9737 | 136 | 40 |    |
|    | 30 | 9.735 2321 | 325 | 9.811 2721 | 461   | 0.188 7279 | 9.923 9601 | 137 | 30 |    |
|    | 40 | 9.735 2646 | 325 | 9.811 3182 | 462   | 0.188 6818 | 9.923 9464 | 136 | 20 |    |
|    | 50 | 9.735 2971 | 325 | 9.811 3644 | 461   | 0.188 6356 | 9.923 9328 | 137 | 10 |    |
| 56 | 0  | 9.735 3296 | 325 | 9.811 4105 | 461   | 0.188 5895 | 9.923 9191 | 136 | 0  | 4  |
|    | 10 | 9.735 3621 | 325 | 9.811 4566 | 462   | 0.188 5434 | 9.923 9055 | 136 | 50 |    |
|    | 20 | 9.735 3946 | 325 | 9.811 5028 | 461   | 0.188 4972 | 9.923 8919 | 137 | 40 |    |
|    | 30 | 9.735 4271 | 325 | 9.811 5489 | 462   | 0.188 4511 | 9.923 8782 | 136 | 30 |    |
|    | 40 | 9.735 4596 | 325 | 9.811 5951 | 461   | 0.188 4049 | 9.923 8646 | 137 | 20 |    |
|    | 50 | 9.735 4921 | 325 | 9.811 6412 | 461   | 0.188 3588 | 9.923 8509 | 136 | 10 |    |
| 57 | 0  | 9.735 5246 | 325 | 9.811 6873 | 461   | 0.188 3127 | 9.923 8373 | 137 | 0  | 3  |
|    | 10 | 9.735 5571 | 325 | 9.811 7334 | 462   | 0.188 2666 | 9.923 8236 | 136 | 50 |    |
|    | 20 | 9.735 5896 | 324 | 9.811 7796 | 461   | 0.188 2204 | 9.923 8100 | 137 | 40 |    |
|    | 30 | 9.735 6220 | 325 | 9.811 8257 | 461   | 0.188 1743 | 9.923 7963 | 136 | 30 |    |
|    | 40 | 9.735 6545 | 325 | 9.811 8718 | 462   | 0.188 1282 | 9.923 7827 | 137 | 20 |    |
|    | 50 | 9.735 6870 | 325 | 9.811 9180 | 461   | 0.188 0820 | 9.923 7690 | 136 | 10 |    |
| 58 | 0  | 9.735 7195 | 324 | 9.811 9641 | 461   | 0.188 0359 | 9.923 7554 | 137 | 0  | 2  |
|    | 10 | 9.735 7519 | 325 | 9.812 0102 | 461   | 0.187 9898 | 9.923 7417 | 136 | 50 |    |
|    | 20 | 9.735 7844 | 324 | 9.812 0563 | 461   | 0.187 9437 | 9.923 7281 | 137 | 40 |    |
|    | 30 | 9.735 8168 | 325 | 9.812 1024 | 461   | 0.187 8976 | 9.923 7144 | 137 | 30 |    |
|    | 40 | 9.735 8493 | 324 | 9.812 1485 | 461   | 0.187 8515 | 9.923 7007 | 136 | 20 |    |
|    | 50 | 9.735 8817 | 325 | 9.812 1946 | 462   | 0.187 8054 | 9.923 6871 | 137 | 10 |    |
| 59 | 0  | 9.735 9142 | 324 | 9.812 2408 | 461   | 0.187 7592 | 9.923 6734 | 136 | 0  | 1  |
|    | 10 | 9.735 9466 | 324 | 9.812 2869 | 461   | 0.187 7131 | 9.923 6598 | 137 | 50 |    |
|    | 20 | 9.735 9790 | 325 | 9.812 3330 | 461   | 0.187 6670 | 9.923 6461 | 137 | 40 |    |
|    | 30 | 9.736 0115 | 324 | 9.812 3791 | 461   | 0.187 6209 | 9.923 6324 | 137 | 30 |    |
|    | 40 | 9.736 0439 | 324 | 9.812 4252 | 461   | 0.187 5748 | 9.923 6187 | 136 | 20 |    |
|    | 50 | 9.736 0763 | 325 | 9.812 4713 | 461   | 0.187 5287 | 9.923 6051 | 137 | 10 |    |
| 60 | 0  | 9.736 1088 |     | 9.812 5174 |       | 0.187 4826 | 9.923 5914 |     | 0  | 0  |
|    | "  | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d.  | "  |    |

462  
1 46.2  
2 92.4  
3 138.6  
4 184.8  
5 231.0  
6 277.2  
7 323.4  
8 369.6  
9 415.8

461  
1 46.1  
2 92.2  
3 138.3  
4 184.4  
5 230.5  
6 276.6  
7 322.7  
8 368.8  
9 414.9

326  
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2 65.2  
3 97.8  
4 130.4  
5 163.0  
6 195.6  
7 228.2  
8 260.8  
9 293.4

325  
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2 65.0  
3 97.5  
4 130.0  
5 162.5  
6 195.0  
7 227.5  
8 260.0  
9 292.5

324  
1 32.4  
2 64.8  
3 97.2  
4 129.6  
5 162.0  
6 194.4  
7 226.8  
8 259.2  
9 291.6

137  
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2 27.4  
3 41.1  
4 54.8  
5 68.5  
6 82.2  
7 95.9  
8 109.6  
9 123.3



461  
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2 92.1  
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8 368.8  
9 414.9  
  
460  
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2 92.0  
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2 64.8  
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9 291.6  
  
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2 64.6  
3 96.9  
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6 193.8  
7 226.1  
8 258.4  
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4 54.8  
5 68.5  
6 82.2  
7 95.9  
8 109.6  
9 123.3  
  
138  
1 13.8  
2 27.6  
3 41.4  
4 55.2  
5 69.0  
6 82.8  
7 96.6  
8 110.4  
9 124.2

|    | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d.  | "  |    |
|----|----|------------|-----|------------|-------|------------|------------|-----|----|----|
| 0  | 0  | 9.736 1088 |     | 9.812 5174 |       | 0.187 4826 | 9.923 5914 |     | 0  | 60 |
|    | 10 | 9.736 1412 | 324 | 9.812 5635 | 461   | 0.187 4365 | 9.923 5777 | 137 | 50 |    |
|    | 20 | 9.736 1736 | 324 | 9.812 6095 | 461   | 0.187 3905 | 9.923 5641 | 136 | 40 |    |
|    | 30 | 9.736 2060 | 324 | 9.812 6556 | 461   | 0.187 3444 | 9.923 5504 | 137 | 30 |    |
|    | 40 | 9.736 2384 | 324 | 9.812 7017 | 461   | 0.187 2983 | 9.923 5367 | 137 | 20 |    |
|    | 50 | 9.736 2708 | 324 | 9.812 7478 | 461   | 0.187 2522 | 9.923 5230 | 137 | 10 |    |
| 1  | 0  | 9.736 3032 |     | 9.812 7939 |       | 0.187 2061 | 9.923 5093 | 136 | 0  | 50 |
|    | 10 | 9.736 3356 | 324 | 9.812 8400 | 461   | 0.187 1600 | 9.923 4957 | 137 | 50 |    |
|    | 20 | 9.736 3680 | 324 | 9.812 8861 | 461   | 0.187 1139 | 9.923 4820 | 137 | 40 |    |
|    | 30 | 9.736 4004 | 324 | 9.812 9321 | 461   | 0.187 0679 | 9.923 4683 | 137 | 30 |    |
|    | 40 | 9.736 4328 | 324 | 9.812 9782 | 461   | 0.187 0218 | 9.923 4546 | 137 | 20 |    |
|    | 50 | 9.736 4652 | 324 | 9.813 0243 | 461   | 0.186 9757 | 9.923 4409 | 137 | 10 |    |
| 2  | 0  | 9.736 4976 |     | 9.813 0704 |       | 0.186 9296 | 9.923 4272 | 137 | 0  | 58 |
|    | 10 | 9.736 5300 | 323 | 9.813 1164 | 461   | 0.186 8836 | 9.923 4135 | 137 | 50 |    |
|    | 20 | 9.736 5623 | 324 | 9.813 1625 | 461   | 0.186 8375 | 9.923 3998 | 137 | 40 |    |
|    | 30 | 9.736 5947 | 324 | 9.813 2086 | 461   | 0.186 7914 | 9.923 3861 | 137 | 30 |    |
|    | 40 | 9.736 6271 | 323 | 9.813 2546 | 461   | 0.186 7454 | 9.923 3724 | 137 | 20 |    |
|    | 50 | 9.736 6594 | 324 | 9.813 3007 | 461   | 0.186 6993 | 9.923 3587 | 137 | 10 |    |
| 3  | 0  | 9.736 6918 |     | 9.813 3468 |       | 0.186 6532 | 9.923 3450 | 137 | 0  | 57 |
|    | 10 | 9.736 7242 | 323 | 9.813 3928 | 461   | 0.186 6072 | 9.923 3313 | 137 | 50 |    |
|    | 20 | 9.736 7565 | 324 | 9.813 4389 | 461   | 0.186 5611 | 9.923 3176 | 137 | 40 |    |
|    | 30 | 9.736 7889 | 323 | 9.813 4849 | 461   | 0.186 5151 | 9.923 3039 | 137 | 30 |    |
|    | 40 | 9.736 8212 | 324 | 9.813 5310 | 461   | 0.186 4690 | 9.923 2902 | 137 | 20 |    |
|    | 50 | 9.736 8536 | 323 | 9.813 5770 | 461   | 0.186 4230 | 9.923 2765 | 137 | 10 |    |
| 4  | 0  | 9.736 8859 |     | 9.813 6231 |       | 0.186 3769 | 9.923 2628 | 137 | 0  | 56 |
|    | 10 | 9.736 9182 | 323 | 9.813 6691 | 461   | 0.186 3309 | 9.923 2491 | 137 | 50 |    |
|    | 20 | 9.736 9506 | 323 | 9.813 7152 | 461   | 0.186 2848 | 9.923 2354 | 137 | 40 |    |
|    | 30 | 9.736 9829 | 323 | 9.813 7612 | 461   | 0.186 2388 | 9.923 2217 | 137 | 30 |    |
|    | 40 | 9.737 0152 | 323 | 9.813 8073 | 461   | 0.186 1927 | 9.923 2080 | 137 | 20 |    |
|    | 50 | 9.737 0476 | 324 | 9.813 8533 | 461   | 0.186 1467 | 9.923 1943 | 138 | 10 |    |
| 5  | 0  | 9.737 0799 |     | 9.813 8993 |       | 0.186 1007 | 9.923 1805 | 137 | 0  | 55 |
|    | 10 | 9.737 1122 | 323 | 9.813 9454 | 461   | 0.186 0546 | 9.923 1668 | 137 | 50 |    |
|    | 20 | 9.737 1445 | 323 | 9.813 9914 | 461   | 0.186 0086 | 9.923 1531 | 137 | 40 |    |
|    | 30 | 9.737 1768 | 323 | 9.814 0374 | 461   | 0.185 9626 | 9.923 1394 | 137 | 30 |    |
|    | 40 | 9.737 2091 | 323 | 9.814 0835 | 461   | 0.185 9165 | 9.923 1257 | 138 | 20 |    |
|    | 50 | 9.737 2414 | 323 | 9.814 1295 | 461   | 0.185 8705 | 9.923 1119 | 137 | 10 |    |
| 6  | 0  | 9.737 2737 |     | 9.814 1755 |       | 0.185 8245 | 9.923 0982 | 137 | 0  | 54 |
|    | 10 | 9.737 3060 | 323 | 9.814 2215 | 461   | 0.185 7785 | 9.923 0845 | 137 | 50 |    |
|    | 20 | 9.737 3383 | 323 | 9.814 2676 | 461   | 0.185 7324 | 9.923 0708 | 138 | 40 |    |
|    | 30 | 9.737 3706 | 323 | 9.814 3136 | 461   | 0.185 6864 | 9.923 0570 | 137 | 30 |    |
|    | 40 | 9.737 4029 | 323 | 9.814 3596 | 461   | 0.185 6404 | 9.923 0433 | 137 | 20 |    |
|    | 50 | 9.737 4352 | 323 | 9.814 4056 | 461   | 0.185 5944 | 9.923 0296 | 138 | 10 |    |
| 7  | 0  | 9.737 4675 |     | 9.814 4516 |       | 0.185 5484 | 9.923 0158 | 137 | 0  | 53 |
|    | 10 | 9.737 4997 | 323 | 9.814 4976 | 461   | 0.185 5024 | 9.923 0021 | 137 | 50 |    |
|    | 20 | 9.737 5320 | 323 | 9.814 5436 | 461   | 0.185 4564 | 9.922 9884 | 138 | 40 |    |
|    | 30 | 9.737 5643 | 323 | 9.814 5897 | 461   | 0.185 4103 | 9.922 9746 | 137 | 30 |    |
|    | 40 | 9.737 5966 | 322 | 9.814 6357 | 461   | 0.185 3643 | 9.922 9609 | 138 | 20 |    |
|    | 50 | 9.737 6288 | 323 | 9.814 6817 | 461   | 0.185 3183 | 9.922 9471 | 137 | 10 |    |
| 8  | 0  | 9.737 6611 |     | 9.814 7277 |       | 0.185 2723 | 9.922 9334 | 137 | 0  | 52 |
|    | 10 | 9.737 6933 | 323 | 9.814 7737 | 461   | 0.185 2263 | 9.922 9197 | 138 | 50 |    |
|    | 20 | 9.737 7256 | 322 | 9.814 8197 | 461   | 0.185 1803 | 9.922 9059 | 137 | 40 |    |
|    | 30 | 9.737 7578 | 323 | 9.814 8657 | 461   | 0.185 1343 | 9.922 8922 | 138 | 30 |    |
|    | 40 | 9.737 7901 | 322 | 9.814 9117 | 459   | 0.185 0883 | 9.922 8784 | 137 | 20 |    |
|    | 50 | 9.737 8223 | 323 | 9.814 9576 | 461   | 0.185 0424 | 9.922 8647 | 138 | 10 |    |
| 9  | 0  | 9.737 8546 |     | 9.815 0036 |       | 0.184 9964 | 9.922 8509 | 137 | 0  | 51 |
|    | 10 | 9.737 8868 | 322 | 9.815 0496 | 461   | 0.184 9504 | 9.922 8372 | 138 | 50 |    |
|    | 20 | 9.737 9190 | 323 | 9.815 0956 | 461   | 0.184 9044 | 9.922 8234 | 137 | 40 |    |
|    | 30 | 9.737 9513 | 322 | 9.815 1416 | 461   | 0.184 8584 | 9.922 8097 | 138 | 30 |    |
|    | 40 | 9.737 9835 | 322 | 9.815 1876 | 461   | 0.184 8124 | 9.922 7959 | 138 | 20 |    |
|    | 50 | 9.738 0157 | 322 | 9.815 2336 | 459   | 0.184 7664 | 9.922 7821 | 137 | 10 |    |
| 10 | 0  | 9.738 0479 |     | 9.815 2795 |       | 0.184 7205 | 9.922 7684 | 137 | 0  | 50 |
|    | "  | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d.  | "  |    |



|    |    | Sm         | d.  | Tang       | d. c. | Cotg       | Cos        | d.  |    |    |
|----|----|------------|-----|------------|-------|------------|------------|-----|----|----|
| 10 | 0  | 9.738 0479 | 322 | 9.815 2795 | 460   | 0.184 7205 | 9.922 7684 | 138 | 0  | 50 |
|    | 10 | 9.738 0801 | 322 | 9.815 3255 | 460   | 0.184 6745 | 9.922 7546 | 137 | 50 |    |
|    | 20 | 9.738 1123 | 322 | 9.815 3715 | 460   | 0.184 6285 | 9.922 7409 | 137 | 40 |    |
|    | 30 | 9.738 1446 | 323 | 9.815 4175 | 459   | 0.184 5825 | 9.922 7271 | 138 | 30 |    |
|    | 40 | 9.738 1768 | 322 | 9.815 4634 | 460   | 0.184 5366 | 9.922 7133 | 138 | 20 |    |
|    | 50 | 9.738 2090 | 322 | 9.815 5094 | 460   | 0.184 4906 | 9.922 6996 | 137 | 10 |    |
| 11 | 0  | 9.738 2412 | 322 | 9.815 5554 | 459   | 0.184 4446 | 9.922 6858 | 138 | 0  | 49 |
|    | 10 | 9.738 2734 | 321 | 9.815 6013 | 460   | 0.184 3987 | 9.922 6720 | 137 | 50 |    |
|    | 20 | 9.738 3055 | 322 | 9.815 6473 | 460   | 0.184 3527 | 9.922 6583 | 138 | 40 |    |
|    | 30 | 9.738 3377 | 322 | 9.815 6933 | 459   | 0.184 3067 | 9.922 6445 | 138 | 30 |    |
|    | 40 | 9.738 3699 | 322 | 9.815 7392 | 460   | 0.184 2608 | 9.922 6307 | 138 | 20 |    |
|    | 50 | 9.738 4021 | 322 | 9.815 7852 | 459   | 0.184 2148 | 9.922 6169 | 137 | 10 |    |
| 12 | 0  | 9.738 4343 | 321 | 9.815 8311 | 460   | 0.184 1689 | 9.922 6032 | 138 | 0  | 48 |
|    | 10 | 9.738 4664 | 322 | 9.815 8771 | 459   | 0.184 1229 | 9.922 5894 | 138 | 50 |    |
|    | 20 | 9.738 4986 | 322 | 9.815 9230 | 460   | 0.184 0770 | 9.922 5756 | 138 | 40 |    |
|    | 30 | 9.738 5308 | 321 | 9.815 9690 | 459   | 0.184 0310 | 9.922 5618 | 138 | 30 |    |
|    | 40 | 9.738 5629 | 322 | 9.816 0149 | 460   | 0.183 9851 | 9.922 5480 | 138 | 20 |    |
|    | 50 | 9.738 5951 | 322 | 9.816 0609 | 459   | 0.183 9391 | 9.922 5342 | 137 | 10 |    |
| 13 | 0  | 9.738 6273 | 321 | 9.816 1068 | 460   | 0.183 8932 | 9.922 5205 | 138 | 0  | 47 |
|    | 10 | 9.738 6594 | 322 | 9.816 1528 | 459   | 0.183 8472 | 9.922 5067 | 138 | 50 |    |
|    | 20 | 9.738 6916 | 321 | 9.816 1987 | 459   | 0.183 8013 | 9.922 4929 | 138 | 40 |    |
|    | 30 | 9.738 7237 | 322 | 9.816 2446 | 460   | 0.183 7554 | 9.922 4791 | 138 | 30 |    |
|    | 40 | 9.738 7559 | 321 | 9.816 2906 | 459   | 0.183 7094 | 9.922 4653 | 138 | 20 |    |
|    | 50 | 9.738 7880 | 321 | 9.816 3365 | 459   | 0.183 6635 | 9.922 4515 | 138 | 10 |    |
| 14 | 0  | 9.738 8201 | 322 | 9.816 3824 | 460   | 0.183 6176 | 9.922 4377 | 138 | 0  | 46 |
|    | 10 | 9.738 8523 | 321 | 9.816 4284 | 459   | 0.183 5716 | 9.922 4239 | 138 | 50 |    |
|    | 20 | 9.738 8844 | 321 | 9.816 4743 | 459   | 0.183 5257 | 9.922 4101 | 138 | 40 |    |
|    | 30 | 9.738 9165 | 321 | 9.816 5202 | 459   | 0.183 4798 | 9.922 3963 | 138 | 30 |    |
|    | 40 | 9.738 9486 | 322 | 9.816 5661 | 460   | 0.183 4339 | 9.922 3825 | 138 | 20 |    |
|    | 50 | 9.738 9808 | 321 | 9.816 6121 | 459   | 0.183 3879 | 9.922 3687 | 138 | 10 |    |
| 15 | 0  | 9.739 0129 | 321 | 9.816 6580 | 459   | 0.183 3420 | 9.922 3549 | 138 | 0  | 45 |
|    | 10 | 9.739 0450 | 321 | 9.816 7039 | 459   | 0.183 2961 | 9.922 3411 | 138 | 50 |    |
|    | 20 | 9.739 0771 | 321 | 9.816 7498 | 459   | 0.183 2502 | 9.922 3273 | 138 | 40 |    |
|    | 30 | 9.739 1092 | 321 | 9.816 7957 | 459   | 0.183 2043 | 9.922 3135 | 138 | 30 |    |
|    | 40 | 9.739 1413 | 321 | 9.816 8416 | 459   | 0.183 1584 | 9.922 2997 | 138 | 20 |    |
|    | 50 | 9.739 1734 | 321 | 9.816 8875 | 460   | 0.183 1125 | 9.922 2859 | 138 | 10 |    |
| 16 | 0  | 9.739 2055 | 321 | 9.816 9335 | 459   | 0.183 0665 | 9.922 2721 | 139 | 0  | 44 |
|    | 10 | 9.739 2376 | 321 | 9.816 9794 | 459   | 0.183 0206 | 9.922 2582 | 138 | 50 |    |
|    | 20 | 9.739 2697 | 321 | 9.817 0253 | 459   | 0.182 9747 | 9.922 2444 | 138 | 40 |    |
|    | 30 | 9.739 3018 | 321 | 9.817 0712 | 459   | 0.182 9288 | 9.922 2306 | 138 | 30 |    |
|    | 40 | 9.739 3339 | 320 | 9.817 1171 | 459   | 0.182 8829 | 9.922 2168 | 138 | 20 |    |
|    | 50 | 9.739 3659 | 321 | 9.817 1630 | 459   | 0.182 8370 | 9.922 2030 | 139 | 10 |    |
| 17 | 0  | 9.739 3980 | 321 | 9.817 2089 | 459   | 0.182 7911 | 9.922 1891 | 138 | 0  | 43 |
|    | 10 | 9.739 4301 | 321 | 9.817 2548 | 459   | 0.182 7452 | 9.922 1753 | 138 | 50 |    |
|    | 20 | 9.739 4622 | 320 | 9.817 3007 | 458   | 0.182 6993 | 9.922 1615 | 138 | 40 |    |
|    | 30 | 9.739 4942 | 321 | 9.817 3465 | 459   | 0.182 6535 | 9.922 1477 | 138 | 30 |    |
|    | 40 | 9.739 5263 | 320 | 9.817 3924 | 459   | 0.182 6076 | 9.922 1339 | 139 | 20 |    |
|    | 50 | 9.739 5583 | 321 | 9.817 4383 | 459   | 0.182 5617 | 9.922 1200 | 138 | 10 |    |
| 18 | 0  | 9.739 5904 | 320 | 9.817 4842 | 459   | 0.182 5158 | 9.922 1062 | 138 | 0  | 42 |
|    | 10 | 9.739 6224 | 321 | 9.817 5301 | 459   | 0.182 4699 | 9.922 0924 | 139 | 50 |    |
|    | 20 | 9.739 6545 | 320 | 9.817 5760 | 458   | 0.182 4240 | 9.922 0785 | 138 | 40 |    |
|    | 30 | 9.739 6865 | 321 | 9.817 6218 | 459   | 0.182 3782 | 9.922 0647 | 138 | 30 |    |
|    | 40 | 9.739 7186 | 320 | 9.817 6677 | 459   | 0.182 3323 | 9.922 0509 | 139 | 20 |    |
|    | 50 | 9.739 7506 | 321 | 9.817 7136 | 459   | 0.182 2864 | 9.922 0370 | 138 | 10 |    |
| 19 | 0  | 9.739 7827 | 320 | 9.817 7595 | 458   | 0.182 2405 | 9.922 0232 | 139 | 0  | 41 |
|    | 10 | 9.739 8147 | 320 | 9.817 8053 | 459   | 0.182 1947 | 9.922 0093 | 138 | 50 |    |
|    | 20 | 9.739 8467 | 320 | 9.817 8512 | 459   | 0.182 1488 | 9.921 9955 | 138 | 40 |    |
|    | 30 | 9.739 8787 | 321 | 9.817 8971 | 458   | 0.182 1029 | 9.921 9817 | 139 | 30 |    |
|    | 40 | 9.739 9108 | 320 | 9.817 9429 | 459   | 0.182 0571 | 9.921 9678 | 138 | 20 |    |
|    | 50 | 9.739 9428 | 320 | 9.817 9888 | 459   | 0.182 0112 | 9.921 9540 | 139 | 10 |    |
| 20 | 0  | 9.739 9748 | 320 | 9.818 0347 | 459   | 0.181 9653 | 9.921 9401 | 139 | 0  | 40 |

459  
1 45.2  
2 91.8  
3 137.7  
4 183.6  
5 229.5  
6 275.4  
7 321.3  
8 367.2  
9 413.1

458  
1 45.8  
2 91.6  
3 137.4  
4 183.2  
5 229.0  
6 274.8  
7 320.6  
8 366.4  
9 412.2

322  
1 31.1  
2 61.4  
3 96.6  
4 128.8  
5 161.0  
6 193.2  
7 225.4  
8 257.6  
9 289.8

821  
1 31.1  
2 61.2  
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4 128.4  
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7 224.7  
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820  
1 32.0  
2 64.0  
3 96.0  
4 128.0  
5 160.0  
6 192.0  
7 224.0  
8 256.0  
9 288.0

139  
1 13.9  
2 27.8  
3 41.7  
4 55.6  
5 69.5  
6 83.4  
7 97.3  
8 111.2  
9 125.1



|         |    | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d.  |    |    |
|---------|----|------------|-----|------------|-------|------------|------------|-----|----|----|
| 459     | 20 | 0.739 9748 | 320 | 9.818 0347 | 458   | 0.181 9653 | 9.921 9401 | 138 | 0  | 40 |
| 1 45.9  | 10 | 9.740 0068 | 320 | 9.818 0805 | 459   | 0.181 9195 | 9.921 9263 | 139 | 50 |    |
| 2 91.8  | 20 | 9.740 0388 | 320 | 9.818 1264 | 458   | 0.181 8736 | 9.921 9124 | 138 | 40 |    |
| 3 137.7 | 30 | 9.740 0708 | 320 | 9.818 1722 | 459   | 0.181 8278 | 9.921 8986 | 139 | 30 |    |
| 4 183.6 | 40 | 9.740 1028 | 320 | 9.818 2181 | 459   | 0.181 7819 | 9.921 8847 | 138 | 20 |    |
| 5 229.5 | 50 | 9.740 1348 | 320 | 9.818 2640 | 458   | 0.181 7360 | 9.921 8709 | 139 | 10 |    |
| 6 275.4 | 21 | 0.740 1668 | 320 | 9.818 3098 | 459   | 0.181 6902 | 9.921 8570 | 139 | 0  | 39 |
| 7 321.3 | 10 | 9.740 1988 | 320 | 9.818 3557 | 458   | 0.181 6443 | 9.921 8431 | 138 | 50 |    |
| 8 367.2 | 20 | 9.740 2308 | 320 | 9.818 4015 | 458   | 0.181 5985 | 9.921 8293 | 139 | 40 |    |
| 9 413.1 | 30 | 9.740 2628 | 320 | 9.818 4473 | 459   | 0.181 5527 | 9.921 8154 | 138 | 30 |    |
|         | 40 | 9.740 2948 | 320 | 9.818 4932 | 458   | 0.181 5068 | 9.921 8016 | 139 | 20 |    |
|         | 50 | 9.740 3267 | 319 | 9.818 5390 | 458   | 0.181 4610 | 9.921 7877 | 139 | 10 |    |
| 458     | 22 | 0.740 3587 | 320 | 9.818 5849 | 458   | 0.181 4151 | 9.921 7738 | 138 | 0  | 38 |
| 1 45.8  | 10 | 9.740 3907 | 319 | 9.818 6307 | 458   | 0.181 3693 | 9.921 7600 | 139 | 50 |    |
| 2 91.6  | 20 | 9.740 4226 | 320 | 9.818 6765 | 459   | 0.181 3235 | 9.921 7461 | 139 | 40 |    |
| 3 137.4 | 30 | 9.740 4546 | 320 | 9.818 7224 | 458   | 0.181 2777 | 9.921 7322 | 138 | 30 |    |
| 4 183.2 | 40 | 9.740 4866 | 320 | 9.818 7682 | 458   | 0.181 2318 | 9.921 7184 | 139 | 20 |    |
| 5 229.0 | 50 | 9.740 5185 | 319 | 9.818 8140 | 459   | 0.181 1860 | 9.921 7045 | 139 | 10 |    |
| 6 274.8 | 23 | 0.740 5505 | 319 | 9.818 8599 | 458   | 0.181 1401 | 9.921 6906 | 139 | 0  | 37 |
| 7 320.6 | 10 | 9.740 5824 | 320 | 9.818 9057 | 458   | 0.181 0943 | 9.921 6767 | 138 | 50 |    |
| 8 366.4 | 20 | 9.740 6144 | 319 | 9.818 9515 | 458   | 0.181 0485 | 9.921 6629 | 139 | 40 |    |
| 9 412.2 | 30 | 9.740 6463 | 319 | 9.818 9973 | 459   | 0.181 0027 | 9.921 6490 | 139 | 30 |    |
| 320     | 40 | 9.740 6783 | 320 | 9.819 0432 | 458   | 0.180 9568 | 9.921 6351 | 139 | 20 |    |
| 1 32.0  | 50 | 9.740 7102 | 319 | 9.819 0890 | 458   | 0.180 9110 | 9.921 6212 | 139 | 10 |    |
| 2 64.0  | 24 | 0.740 7421 | 320 | 9.819 1348 | 458   | 0.180 8652 | 9.921 6073 | 138 | 0  | 36 |
| 3 96.0  | 10 | 9.740 7741 | 319 | 9.819 1806 | 458   | 0.180 8194 | 9.921 5935 | 139 | 50 |    |
| 4 128.0 | 20 | 9.740 8060 | 319 | 9.819 2264 | 458   | 0.180 7736 | 9.921 5796 | 139 | 40 |    |
| 5 160.0 | 30 | 9.740 8379 | 319 | 9.819 2722 | 458   | 0.180 7278 | 9.921 5657 | 139 | 30 |    |
| 6 192.0 | 40 | 9.740 8698 | 319 | 9.819 3180 | 458   | 0.180 6820 | 9.921 5518 | 139 | 20 |    |
| 7 224.0 | 50 | 9.740 9017 | 320 | 9.819 3638 | 458   | 0.180 6362 | 9.921 5379 | 139 | 10 |    |
| 8 256.0 | 25 | 0.740 9337 | 319 | 9.819 4096 | 458   | 0.180 5904 | 9.921 5240 | 139 | 0  | 35 |
| 9 288.0 | 10 | 9.740 9656 | 319 | 9.819 4554 | 458   | 0.180 5446 | 9.921 5101 | 139 | 50 |    |
| 319     | 20 | 9.740 9975 | 319 | 9.819 5012 | 458   | 0.180 4988 | 9.921 4962 | 139 | 40 |    |
| 1 31.9  | 30 | 9.741 0294 | 319 | 9.819 5470 | 458   | 0.180 4530 | 9.921 4823 | 139 | 30 |    |
| 2 63.8  | 40 | 9.741 0613 | 319 | 9.819 5928 | 458   | 0.180 4072 | 9.921 4684 | 139 | 20 |    |
| 3 95.7  | 50 | 9.741 0932 | 319 | 9.819 6386 | 458   | 0.180 3614 | 9.921 4545 | 139 | 10 |    |
| 4 127.6 | 26 | 0.741 1251 | 319 | 9.819 6844 | 458   | 0.180 3156 | 9.921 4406 | 139 | 0  | 34 |
| 5 159.5 | 10 | 9.741 1570 | 318 | 9.819 7302 | 458   | 0.180 2698 | 9.921 4267 | 139 | 50 |    |
| 6 191.4 | 20 | 9.741 1888 | 319 | 9.819 7760 | 458   | 0.180 2240 | 9.921 4128 | 139 | 40 |    |
| 7 223.3 | 30 | 9.741 2207 | 319 | 9.819 8218 | 458   | 0.180 1782 | 9.921 3989 | 139 | 30 |    |
| 8 255.2 | 40 | 9.741 2526 | 319 | 9.819 8676 | 458   | 0.180 1324 | 9.921 3850 | 139 | 20 |    |
| 9 287.1 | 50 | 9.741 2845 | 319 | 9.819 9134 | 458   | 0.180 0866 | 9.921 3711 | 139 | 10 |    |
| 138     | 27 | 0.741 3164 | 318 | 9.819 9592 | 457   | 0.180 0408 | 9.921 3572 | 139 | 0  | 33 |
| 1 13.8  | 10 | 9.741 3482 | 319 | 9.820 0049 | 458   | 0.179 9951 | 9.921 3433 | 139 | 50 |    |
| 2 45.6  | 20 | 9.741 3801 | 319 | 9.820 0507 | 458   | 0.179 9493 | 9.921 3294 | 139 | 40 |    |
| 3 77.4  | 30 | 9.741 4120 | 319 | 9.820 0965 | 458   | 0.179 9035 | 9.921 3155 | 139 | 30 |    |
| 4 109.2 | 40 | 9.741 4438 | 318 | 9.820 1423 | 457   | 0.179 8577 | 9.921 3016 | 140 | 20 |    |
| 5 141.0 | 50 | 9.741 4757 | 318 | 9.820 1880 | 457   | 0.179 8120 | 9.921 2876 | 139 | 10 |    |
| 6 172.8 | 28 | 0.741 5075 | 319 | 9.820 2338 | 458   | 0.179 7662 | 9.921 2737 | 139 | 0  | 32 |
| 7 204.6 | 10 | 9.741 5394 | 318 | 9.820 2796 | 457   | 0.179 7204 | 9.921 2598 | 139 | 50 |    |
| 8 236.4 | 20 | 9.741 5712 | 319 | 9.820 3253 | 458   | 0.179 6747 | 9.921 2459 | 139 | 40 |    |
| 9 268.2 | 30 | 9.741 6031 | 318 | 9.820 3711 | 458   | 0.179 6289 | 9.921 2320 | 140 | 30 |    |
| 1 299.9 | 40 | 9.741 6349 | 318 | 9.820 4169 | 457   | 0.179 5831 | 9.921 2180 | 139 | 20 |    |
| 2 331.7 | 50 | 9.741 6667 | 319 | 9.820 4626 | 458   | 0.179 5374 | 9.921 2041 | 139 | 10 |    |
| 3 363.5 | 29 | 0.741 6986 | 318 | 9.820 5084 | 457   | 0.179 4916 | 9.921 1902 | 139 | 0  | 31 |
| 4 395.3 | 10 | 9.741 7304 | 318 | 9.820 5541 | 458   | 0.179 4459 | 9.921 1763 | 140 | 50 |    |
| 5 427.1 | 20 | 9.741 7622 | 318 | 9.820 5999 | 458   | 0.179 4001 | 9.921 1623 | 139 | 40 |    |
| 6 458.9 | 30 | 9.741 7940 | 319 | 9.820 6457 | 457   | 0.179 3543 | 9.921 1484 | 139 | 30 |    |
| 7 490.7 | 40 | 9.741 8259 | 318 | 9.820 6914 | 458   | 0.179 3086 | 9.921 1345 | 140 | 20 |    |
| 8 522.5 | 50 | 9.741 8577 | 318 | 9.820 7372 | 457   | 0.179 2628 | 9.921 1205 | 139 | 10 |    |
| 9 554.3 | 30 | 9.741 8895 | 318 | 9.820 7829 | 457   | 0.179 2171 | 9.921 1066 | 139 | 0  |    |
|         | 30 |            |     |            |       |            |            |     |    |    |
|         |    | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d.  |    |    |



|    | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d.  | "  |         |
|----|----|------------|-----|------------|-------|------------|------------|-----|----|---------|
| 30 | 0  | 9.741 8895 | 318 | 9.820 7829 | 458   | 0.179 2171 | 9.921 1066 | 139 | 0  | 30      |
|    | 10 | 9.741 9213 | 318 | 9.820 8287 | 457   | 0.179 1713 | 9.921 0927 | 140 | 50 | 457     |
|    | 20 | 9.741 9531 | 318 | 9.820 8744 | 457   | 0.179 1256 | 9.921 0787 | 140 | 40 | 2 45.7  |
|    | 30 | 9.741 9849 | 318 | 9.820 9201 | 458   | 0.179 0799 | 9.921 0648 | 139 | 30 | 3 91.4  |
|    | 40 | 9.742 0167 | 318 | 9.820 9659 | 457   | 0.179 0341 | 9.921 0508 | 140 | 20 | 3 137.1 |
|    | 50 | 9.742 0485 | 318 | 9.821 0116 | 458   | 0.178 9884 | 9.921 0369 | 139 | 10 | 4 182.8 |
| 31 | 0  | 9.742 0803 | 318 | 9.821 0574 | 457   | 0.178 9426 | 9.921 0229 | 140 | 0  | 5 228.5 |
|    | 10 | 9.742 1121 | 318 | 9.821 1031 | 457   | 0.178 8969 | 9.921 0090 | 139 | 50 | 6 274.2 |
|    | 20 | 9.742 1439 | 318 | 9.821 1488 | 458   | 0.178 8512 | 9.920 9951 | 140 | 40 | 7 319.9 |
|    | 30 | 9.742 1757 | 317 | 9.821 1946 | 457   | 0.178 8054 | 9.920 9811 | 139 | 30 | 8 365.6 |
|    | 40 | 9.742 2074 | 318 | 9.821 2403 | 457   | 0.178 7597 | 9.920 9672 | 140 | 20 | 9 411.3 |
|    | 50 | 9.742 2392 | 318 | 9.821 2860 | 457   | 0.178 7140 | 9.920 9532 | 139 | 10 |         |
| 32 | 0  | 9.742 2710 | 318 | 9.821 3317 | 458   | 0.178 6683 | 9.920 9393 | 140 | 0  | 28      |
|    | 10 | 9.742 3028 | 317 | 9.821 3775 | 457   | 0.178 6225 | 9.920 9253 | 140 | 50 | 1 45.6  |
|    | 20 | 9.742 3345 | 318 | 9.821 4232 | 457   | 0.178 5768 | 9.920 9113 | 139 | 40 | 2 91.1  |
|    | 30 | 9.742 3663 | 317 | 9.821 4689 | 457   | 0.178 5311 | 9.920 8974 | 140 | 30 | 3 136.8 |
|    | 40 | 9.742 3980 | 318 | 9.821 5146 | 457   | 0.178 4854 | 9.920 8834 | 139 | 20 | 4 182.4 |
|    | 50 | 9.742 4298 | 318 | 9.821 5603 | 457   | 0.178 4397 | 9.920 8695 | 140 | 10 | 5 228.0 |
| 33 | 0  | 9.742 4616 | 317 | 9.821 6060 | 458   | 0.178 3940 | 9.920 8555 | 140 | 0  | 6 274.2 |
|    | 10 | 9.742 4933 | 317 | 9.821 6518 | 457   | 0.178 3482 | 9.920 8415 | 139 | 50 | 7 319.9 |
|    | 20 | 9.742 5250 | 318 | 9.821 6975 | 457   | 0.178 3025 | 9.920 8276 | 140 | 40 | 8 365.6 |
|    | 30 | 9.742 5568 | 317 | 9.821 7432 | 457   | 0.178 2568 | 9.920 8136 | 140 | 30 | 9 411.3 |
|    | 40 | 9.742 5885 | 318 | 9.821 7889 | 457   | 0.178 2111 | 9.920 7996 | 139 | 20 |         |
|    | 50 | 9.742 6203 | 317 | 9.821 8346 | 457   | 0.178 1654 | 9.920 7857 | 140 | 10 | 318     |
| 34 | 0  | 9.742 6520 | 317 | 9.821 8803 | 457   | 0.178 1197 | 9.920 7717 | 140 | 0  | 1 31.8  |
|    | 10 | 9.742 6837 | 317 | 9.821 9260 | 457   | 0.178 0740 | 9.920 7577 | 139 | 50 | 2 63.4  |
|    | 20 | 9.742 7154 | 318 | 9.821 9717 | 457   | 0.178 0283 | 9.920 7438 | 140 | 40 | 3 95.1  |
|    | 30 | 9.742 7472 | 317 | 9.822 0174 | 457   | 0.177 9826 | 9.920 7298 | 140 | 30 | 4 126.4 |
|    | 40 | 9.742 7789 | 317 | 9.822 0631 | 457   | 0.177 9369 | 9.920 7158 | 140 | 20 | 5 158.5 |
|    | 50 | 9.742 8106 | 317 | 9.822 1088 | 457   | 0.177 8912 | 9.920 7018 | 140 | 10 | 6 190.2 |
| 35 | 0  | 9.742 8423 | 317 | 9.822 1545 | 457   | 0.177 8455 | 9.920 6878 | 139 | 0  | 7 221.9 |
|    | 10 | 9.742 8740 | 317 | 9.822 2002 | 457   | 0.177 7998 | 9.920 6739 | 140 | 50 | 8 253.6 |
|    | 20 | 9.742 9057 | 317 | 9.822 2459 | 456   | 0.177 7541 | 9.920 6599 | 140 | 40 | 9 285.3 |
|    | 30 | 9.742 9374 | 317 | 9.822 2915 | 457   | 0.177 7085 | 9.920 6459 | 140 | 30 |         |
|    | 40 | 9.742 9691 | 317 | 9.822 3372 | 457   | 0.177 6628 | 9.920 6319 | 140 | 20 | 317     |
|    | 50 | 9.743 0008 | 317 | 9.822 3829 | 457   | 0.177 6171 | 9.920 6179 | 140 | 10 | 1 31.7  |
| 36 | 0  | 9.743 0325 | 317 | 9.822 4286 | 457   | 0.177 5714 | 9.920 6039 | 140 | 0  | 2 63.4  |
|    | 10 | 9.743 0642 | 317 | 9.822 4743 | 456   | 0.177 5257 | 9.920 5899 | 139 | 50 | 3 95.1  |
|    | 20 | 9.743 0959 | 317 | 9.822 5199 | 457   | 0.177 4801 | 9.920 5760 | 140 | 40 | 4 126.4 |
|    | 30 | 9.743 1276 | 317 | 9.822 5656 | 457   | 0.177 4344 | 9.920 5620 | 140 | 30 | 5 158.5 |
|    | 40 | 9.743 1593 | 316 | 9.822 6113 | 457   | 0.177 3887 | 9.920 5480 | 140 | 20 | 6 190.2 |
|    | 50 | 9.743 1909 | 317 | 9.822 6570 | 456   | 0.177 3430 | 9.920 5340 | 140 | 10 | 7 221.9 |
| 37 | 0  | 9.743 2226 | 317 | 9.822 7026 | 457   | 0.177 2974 | 9.920 5200 | 140 | 0  | 8 253.6 |
|    | 10 | 9.743 2543 | 316 | 9.822 7483 | 457   | 0.177 2517 | 9.920 5060 | 140 | 50 | 9 285.3 |
|    | 20 | 9.743 2859 | 317 | 9.822 7940 | 456   | 0.177 2060 | 9.920 4920 | 140 | 40 |         |
|    | 30 | 9.743 3176 | 317 | 9.822 8396 | 457   | 0.177 1604 | 9.920 4780 | 140 | 30 | 316     |
|    | 40 | 9.743 3493 | 316 | 9.822 8853 | 456   | 0.177 1147 | 9.920 4640 | 140 | 20 | 1 31.6  |
|    | 50 | 9.743 3809 | 317 | 9.822 9309 | 457   | 0.177 0691 | 9.920 4500 | 140 | 10 | 2 63.2  |
| 38 | 0  | 9.743 4126 | 316 | 9.822 9766 | 457   | 0.177 0234 | 9.920 4360 | 140 | 0  | 3 94.8  |
|    | 10 | 9.743 4442 | 317 | 9.823 0223 | 456   | 0.176 9777 | 9.920 4220 | 141 | 50 | 4 126.4 |
|    | 20 | 9.743 4759 | 316 | 9.823 0679 | 457   | 0.176 9321 | 9.920 4079 | 140 | 40 | 5 158.5 |
|    | 30 | 9.743 5075 | 316 | 9.823 1136 | 456   | 0.176 8864 | 9.920 3939 | 140 | 30 | 6 189.6 |
|    | 40 | 9.743 5391 | 316 | 9.823 1592 | 457   | 0.176 8408 | 9.920 3799 | 140 | 20 | 7 221.2 |
|    | 50 | 9.743 5708 | 316 | 9.823 2049 | 456   | 0.176 7951 | 9.920 3659 | 140 | 10 | 8 252.8 |
| 39 | 0  | 9.743 6024 | 316 | 9.823 2505 | 457   | 0.176 7495 | 9.920 3519 | 140 | 0  | 9 284.4 |
|    | 10 | 9.743 6340 | 317 | 9.823 2962 | 456   | 0.176 7038 | 9.920 3379 | 140 | 50 |         |
|    | 20 | 9.743 6657 | 316 | 9.823 3418 | 456   | 0.176 6582 | 9.920 3239 | 141 | 40 | 140     |
|    | 30 | 9.743 6973 | 316 | 9.823 3874 | 457   | 0.176 6126 | 9.920 3098 | 140 | 30 | 1 14.0  |
|    | 40 | 9.743 7289 | 316 | 9.823 4331 | 456   | 0.176 5669 | 9.920 2958 | 140 | 20 | 2 28.0  |
|    | 50 | 9.743 7605 | 316 | 9.823 4787 | 457   | 0.176 5213 | 9.920 2818 | 140 | 10 | 3 43.0  |
| 40 | 0  | 9.743 7921 | 316 | 9.823 5244 | 457   | 0.176 4756 | 9.920 2678 | 140 | 0  | 4 56.0  |
|    |    |            |     |            |       |            |            |     |    | 5 70.0  |
|    |    |            |     |            |       |            |            |     |    | 6 84.0  |
|    |    |            |     |            |       |            |            |     |    | 7 98.0  |
|    |    |            |     |            |       |            |            |     |    | 8 112.0 |
|    |    |            |     |            |       |            |            |     |    | 9 126.0 |
|    | "  | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d.  | "  |         |



[illegible]



|    | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d.  | "  |         |
|----|----|------------|-----|------------|-------|------------|------------|-----|----|---------|
| 50 | 0  | 9.745 6828 | 314 | 9.826 2592 | 455   | 0.173 7408 | 9.919 4237 | 142 | 0  | 10      |
|    | 10 | 9.745 7142 | 314 | 9.826 3047 | 455   | 0.173 6953 | 9.919 4695 | 141 | 50 | 455     |
|    | 20 | 9.745 7456 | 314 | 9.826 3502 | 455   | 0.173 6498 | 9.919 3954 | 141 | 40 | 1 45.5  |
|    | 30 | 9.745 7770 | 314 | 9.826 3957 | 455   | 0.173 6043 | 9.919 3813 | 141 | 30 | 2 92.8  |
|    | 40 | 9.745 8084 | 314 | 9.826 4413 | 455   | 0.173 5587 | 9.919 3672 | 141 | 20 | 3 136.5 |
|    | 50 | 9.745 8398 | 314 | 9.826 4868 | 455   | 0.173 5132 | 9.919 3531 | 141 | 10 | 4 181.0 |
| 51 | 0  | 9.745 8712 | 314 | 9.826 5323 | 455   | 0.173 4677 | 9.919 3390 | 142 | 0  | 5 227.5 |
|    | 10 | 9.745 9026 | 314 | 9.826 5778 | 455   | 0.173 4222 | 9.919 3248 | 141 | 50 | 6 273.0 |
|    | 20 | 9.745 9340 | 314 | 9.826 6233 | 455   | 0.173 3767 | 9.919 3107 | 141 | 40 | 7 318.5 |
|    | 30 | 9.745 9654 | 314 | 9.826 6688 | 455   | 0.173 3312 | 9.919 2966 | 141 | 30 | 8 364.0 |
|    | 40 | 9.745 9968 | 314 | 9.826 7143 | 455   | 0.173 2857 | 9.919 2825 | 142 | 20 | 9 409.5 |
|    | 50 | 9.746 0282 | 313 | 9.826 7598 | 455   | 0.173 2402 | 9.919 2683 | 141 | 10 |         |
| 52 | 0  | 9.746 0595 | 313 | 9.826 8053 | 455   | 0.173 1947 | 9.919 2542 | 141 | 0  | 8       |
|    | 10 | 9.746 0909 | 314 | 9.826 8508 | 455   | 0.173 1492 | 9.919 2401 | 142 | 50 | 454     |
|    | 20 | 9.746 1223 | 313 | 9.826 8963 | 455   | 0.173 1037 | 9.919 2259 | 141 | 40 | 1 45.4  |
|    | 30 | 9.746 1536 | 313 | 9.826 9418 | 455   | 0.173 0582 | 9.919 2118 | 141 | 30 | 2 92.8  |
|    | 40 | 9.746 1850 | 314 | 9.826 9873 | 455   | 0.173 0127 | 9.919 1977 | 142 | 20 | 3 136.5 |
|    | 50 | 9.746 2164 | 313 | 9.827 0328 | 455   | 0.172 9672 | 9.919 1835 | 141 | 10 | 4 181.0 |
| 53 | 0  | 9.746 2477 | 314 | 9.827 0783 | 455   | 0.172 9217 | 9.919 1694 | 142 | 0  | 5 227.5 |
|    | 10 | 9.746 2791 | 313 | 9.827 1238 | 455   | 0.172 8762 | 9.919 1552 | 141 | 50 | 6 273.0 |
|    | 20 | 9.746 3104 | 314 | 9.827 1693 | 455   | 0.172 8307 | 9.919 1411 | 141 | 40 | 7 318.5 |
|    | 30 | 9.746 3418 | 313 | 9.827 2148 | 455   | 0.172 7852 | 9.919 1270 | 142 | 30 | 8 364.0 |
|    | 40 | 9.746 3731 | 313 | 9.827 2603 | 455   | 0.172 7397 | 9.919 1128 | 141 | 20 | 9 409.5 |
|    | 50 | 9.746 4044 | 314 | 9.827 3058 | 455   | 0.172 6942 | 9.919 0987 | 142 | 10 |         |
| 54 | 0  | 9.746 4358 | 313 | 9.827 3513 | 454   | 0.172 6487 | 9.919 0845 | 141 | 0  | 6       |
|    | 10 | 9.746 4671 | 313 | 9.827 3967 | 455   | 0.172 6033 | 9.919 0704 | 142 | 50 | 314     |
|    | 20 | 9.746 4984 | 314 | 9.827 4422 | 455   | 0.172 5578 | 9.919 0562 | 141 | 40 | 1 45.4  |
|    | 30 | 9.746 5298 | 313 | 9.827 4877 | 455   | 0.172 5123 | 9.919 0421 | 142 | 30 | 2 92.8  |
|    | 40 | 9.746 5611 | 313 | 9.827 5332 | 454   | 0.172 4668 | 9.919 0279 | 142 | 20 | 3 136.5 |
|    | 50 | 9.746 5924 | 313 | 9.827 5786 | 455   | 0.172 4214 | 9.919 0138 | 141 | 10 | 4 181.0 |
| 55 | 0  | 9.746 6237 | 313 | 9.827 6241 | 455   | 0.172 3759 | 9.918 9996 | 142 | 0  | 5       |
|    | 10 | 9.746 6550 | 313 | 9.827 6696 | 454   | 0.172 3304 | 9.918 9854 | 141 | 50 | 318     |
|    | 20 | 9.746 6863 | 313 | 9.827 7150 | 455   | 0.172 2850 | 9.918 9713 | 142 | 40 | 1 45.4  |
|    | 30 | 9.746 7176 | 313 | 9.827 7605 | 455   | 0.172 2395 | 9.918 9571 | 141 | 30 | 2 9     |



|         |    | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d.  |    |    |
|---------|----|------------|-----|------------|-------|------------|------------|-----|----|----|
| 455     | 0  | 9.747 5617 | 312 | 9.828 9874 | 455   | 0.171 0126 | 9.918 5742 | 142 | 0  | 60 |
| 1 45.5  | 10 | 9.747 5929 | 312 | 9.829 0329 | 454   | 0.170 9671 | 9.918 5600 | 142 | 50 |    |
| 2 91.0  | 20 | 9.747 6241 | 312 | 9.829 0783 | 454   | 0.170 9217 | 9.918 5458 | 142 | 40 |    |
| 3 136.5 | 30 | 9.747 6553 | 312 | 9.829 1237 | 454   | 0.170 8763 | 9.918 5316 | 142 | 30 |    |
| 4 181.0 | 40 | 9.747 6865 | 312 | 9.829 1691 | 454   | 0.170 8309 | 9.918 5174 | 142 | 20 |    |
| 5 227.5 | 50 | 9.747 7177 | 312 | 9.829 2145 | 454   | 0.170 7855 | 9.918 5032 | 142 | 10 |    |
| 6 273.0 | 1  | 9.747 7489 | 312 | 9.829 2599 | 454   | 0.170 7401 | 9.918 4890 | 142 | 0  | 59 |
| 7 318.5 | 10 | 9.747 7801 | 312 | 9.829 3053 | 454   | 0.170 6947 | 9.918 4748 | 142 | 50 |    |
| 8 364.0 | 20 | 9.747 8113 | 312 | 9.829 3507 | 454   | 0.170 6493 | 9.918 4606 | 142 | 40 |    |
| 9 409.5 | 30 | 9.747 8425 | 312 | 9.829 3961 | 454   | 0.170 6039 | 9.918 4463 | 142 | 30 |    |
|         | 40 | 9.747 8736 | 312 | 9.829 4415 | 454   | 0.170 5585 | 9.918 4321 | 142 | 20 |    |
|         | 50 | 9.747 9048 | 312 | 9.829 4869 | 454   | 0.170 5131 | 9.918 4179 | 142 | 10 |    |
| 454     | 2  | 9.747 9360 | 312 | 9.829 5323 | 454   | 0.170 4677 | 9.918 4037 | 142 | 0  | 58 |
| 1 45.4  | 10 | 9.747 9672 | 312 | 9.829 5777 | 454   | 0.170 4223 | 9.918 3895 | 142 | 50 |    |
| 2 90.8  | 20 | 9.747 9984 | 312 | 9.829 6231 | 454   | 0.170 3769 | 9.918 3752 | 142 | 40 |    |
| 3 136.2 | 30 | 9.748 0295 | 312 | 9.829 6685 | 454   | 0.170 3315 | 9.918 3610 | 142 | 30 |    |
| 4 181.6 | 40 | 9.748 0607 | 312 | 9.829 7139 | 454   | 0.170 2861 | 9.918 3468 | 142 | 20 |    |
| 5 227.0 | 50 | 9.748 0918 | 312 | 9.829 7593 | 454   | 0.170 2407 | 9.918 3326 | 142 | 10 |    |
| 6 272.4 | 3  | 9.748 1230 | 312 | 9.829 8047 | 453   | 0.170 1953 | 9.918 3183 | 142 | 0  | 57 |
| 7 317.8 | 10 | 9.748 1542 | 312 | 9.829 8500 | 454   | 0.170 1500 | 9.918 3041 | 142 | 50 |    |
| 8 363.2 | 20 | 9.748 1853 | 312 | 9.829 8954 | 454   | 0.170 1046 | 9.918 2899 | 142 | 40 |    |
| 9 408.6 | 30 | 9.748 2165 | 312 | 9.829 9408 | 454   | 0.170 0592 | 9.918 2756 | 142 | 30 |    |
| 312     | 40 | 9.748 2476 | 312 | 9.829 9862 | 454   | 0.170 0138 | 9.918 2614 | 142 | 20 |    |
| 1 31.2  | 50 | 9.748 2787 | 312 | 9.830 0316 | 454   | 0.169 9684 | 9.918 2472 | 142 | 10 |    |
| 2 76.6  | 4  | 9.748 3099 | 312 | 9.830 0769 | 453   | 0.169 9231 | 9.918 2329 | 142 | 0  | 56 |
| 3 122.0 | 10 | 9.748 3410 | 312 | 9.830 1223 | 454   | 0.169 8777 | 9.918 2187 | 142 | 50 |    |
| 4 167.4 | 20 | 9.748 3722 | 312 | 9.830 1677 | 454   | 0.169 8323 | 9.918 2045 | 142 | 40 |    |
| 5 212.8 | 30 | 9.748 4033 | 312 | 9.830 2131 | 454   | 0.169 7869 | 9.918 1902 | 142 | 30 |    |
| 6 258.2 | 40 | 9.748 4344 | 312 | 9.830 2584 | 454   | 0.169 7416 | 9.918 1760 | 142 | 20 |    |
| 7 303.6 | 50 | 9.748 4655 | 312 | 9.830 3038 | 454   | 0.169 6962 | 9.918 1617 | 142 | 10 |    |
| 8 349.0 | 5  | 9.748 4967 | 312 | 9.830 3492 | 453   | 0.169 6508 | 9.918 1475 | 142 | 0  | 55 |
| 9 394.4 | 10 | 9.748 5278 | 312 | 9.830 3945 | 454   | 0.169 6055 | 9.918 1332 | 142 | 50 |    |
| 311     | 20 | 9.748 5589 | 312 | 9.830 4399 | 454   | 0.169 5601 | 9.918 1190 | 142 | 40 |    |
| 1 31.1  | 30 | 9.748 5900 | 312 | 9.830 4853 | 454   | 0.169 5147 | 9.918 1047 | 142 | 30 |    |
| 2 76.5  | 40 | 9.748 6211 | 312 | 9.830 5306 | 453   | 0.169 4694 | 9.918 0905 | 142 | 20 |    |
| 3 121.9 | 50 | 9.748 6522 | 312 | 9.830 5760 | 454   | 0.169 4240 | 9.918 0762 | 142 | 10 |    |
| 4 167.3 | 6  | 9.748 6833 | 312 | 9.830 6213 | 453   | 0.169 3787 | 9.918 0620 | 142 | 0  | 54 |
| 5 212.7 | 10 | 9.748 7144 | 312 | 9.830 6667 | 454   | 0.169 3333 | 9.918 0477 | 142 | 50 |    |
| 6 258.1 | 20 | 9.748 7455 | 312 | 9.830 7120 | 453   | 0.169 2880 | 9.918 0335 | 142 | 40 |    |
| 7 303.5 | 30 | 9.748 7766 | 312 | 9.830 7574 | 454   | 0.169 2426 | 9.918 0192 | 142 | 30 |    |
| 8 348.9 | 40 | 9.748 8077 | 312 | 9.830 8027 | 453   | 0.169 1973 | 9.918 0049 | 142 | 20 |    |
| 9 394.3 | 50 | 9.748 8388 | 312 | 9.830 8481 | 454   | 0.169 1519 | 9.917 9907 | 142 | 10 |    |
| 310     | 7  | 9.748 8698 | 312 | 9.830 8934 | 453   | 0.169 1066 | 9.917 9764 | 142 | 0  | 53 |
| 1 31.0  | 10 | 9.748 9009 | 312 | 9.830 9388 | 454   | 0.169 0612 | 9.917 9622 | 142 | 50 |    |
| 2 76.4  | 20 | 9.748 9320 | 312 | 9.830 9841 | 453   | 0.169 0159 | 9.917 9479 | 142 | 40 |    |
| 3 121.8 | 30 | 9.748 9631 | 312 | 9.831 0294 | 453   | 0.168 9706 | 9.917 9336 | 142 | 30 |    |
| 4 167.2 | 40 | 9.748 9941 | 312 | 9.831 0748 | 454   | 0.168 9252 | 9.917 9194 | 142 | 20 |    |
| 5 212.6 | 50 | 9.749 0252 | 312 | 9.831 1201 | 453   | 0.168 8799 | 9.917 9051 | 142 | 10 |    |
| 6 258.0 | 8  | 9.749 0562 | 312 | 9.831 1654 | 453   | 0.168 8346 | 9.917 8908 | 142 | 0  | 52 |
| 7 303.4 | 10 | 9.749 0873 | 312 | 9.831 2108 | 454   | 0.168 7892 | 9.917 8765 | 142 | 50 |    |
| 8 348.8 | 20 | 9.749 1184 | 312 | 9.831 2561 | 453   | 0.168 7439 | 9.917 8623 | 142 | 40 |    |
| 9 394.2 | 30 | 9.749 1494 | 312 | 9.831 3014 | 453   | 0.168 6986 | 9.917 8480 | 142 | 30 |    |
| 312     | 40 | 9.749 1805 | 312 | 9.831 3468 | 454   | 0.168 6532 | 9.917 8337 | 142 | 20 |    |
| 1 31.2  | 50 | 9.749 2115 | 312 | 9.831 3921 | 453   | 0.168 6079 | 9.917 8194 | 142 | 10 |    |
| 2 76.6  | 9  | 9.749 2425 | 312 | 9.831 4374 | 453   | 0.168 5626 | 9.917 8051 | 142 | 0  | 51 |
| 3 122.0 | 10 | 9.749 2736 | 312 | 9.831 4827 | 453   | 0.168 5173 | 9.917 7909 | 142 | 50 |    |
| 4 167.4 | 20 | 9.749 3046 | 312 | 9.831 5280 | 453   | 0.168 4720 | 9.917 7766 | 142 | 40 |    |
| 5 212.8 | 30 | 9.749 3357 | 312 | 9.831 5733 | 454   | 0.168 4266 | 9.917 7623 | 142 | 30 |    |
| 6 258.2 | 40 | 9.749 3667 | 312 | 9.831 6187 | 453   | 0.168 3813 | 9.917 7480 | 142 | 20 |    |
| 7 303.6 | 50 | 9.749 3977 | 312 | 9.831 6640 | 453   | 0.168 3360 | 9.917 7337 | 142 | 10 |    |
| 8 349.0 | 10 | 9.749 4287 | 312 | 9.831 7093 | 453   | 0.168 2907 | 9.917 7194 | 142 | 0  | 50 |
| 9 394.4 |    |            |     |            |       |            |            |     |    |    |
|         |    | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d.  |    |    |



|    | "  | Sfn        | d.  | Tang       | d. c. | Cotg       | Cos        | d.  | "  |         |
|----|----|------------|-----|------------|-------|------------|------------|-----|----|---------|
| 10 | o  | 9.749 4287 | 310 | 9.831 7093 | 453   | 0.168 2907 | 9.917 7194 | 143 | o  | 50      |
|    | 10 | 9.749 4597 | 311 | 9.831 7546 | 453   | 0.168 2454 | 9.917 7051 | 143 | 50 | 453     |
|    | 20 | 9.749 4908 | 310 | 9.831 7999 | 453   | 0.168 2001 | 9.917 6908 | 143 | 40 | 1 45.3  |
|    | 30 | 9.749 5218 | 310 | 9.831 8452 | 453   | 0.168 1548 | 9.917 6765 | 143 | 30 | 2 50.6  |
|    | 40 | 9.749 5528 | 310 | 9.831 8905 | 453   | 0.168 1095 | 9.917 6622 | 143 | 20 | 3 135.9 |
|    | 50 | 9.749 5838 | 310 | 9.831 9358 | 453   | 0.168 0642 | 9.917 6479 | 143 | 10 | 4 181.2 |
| 11 | o  | 9.749 6148 | 310 | 9.831 9811 | 453   | 0.168 0189 | 9.917 6336 | 143 | o  | 49      |
|    | 10 | 9.749 6458 | 310 | 9.832 0264 | 453   | 0.167 9736 | 9.917 6193 | 143 | 50 | 5 216.5 |
|    | 20 | 9.749 6768 | 310 | 9.832 0717 | 453   | 0.167 9283 | 9.917 6050 | 143 | 40 | 6 271.8 |
|    | 30 | 9.749 7078 | 310 | 9.832 1170 | 453   | 0.167 8830 | 9.917 5907 | 143 | 30 | 7 317.1 |
|    | 40 | 9.749 7388 | 310 | 9.832 1623 | 453   | 0.167 8377 | 9.917 5764 | 143 | 20 | 8 362.4 |
|    | 50 | 9.749 7698 | 309 | 9.832 2076 | 453   | 0.167 7924 | 9.917 5621 | 143 | 10 | 9 407.7 |
| 12 | o  | 9.749 8007 | 310 | 9.832 2529 | 453   | 0.167 7471 | 9.917 5478 | 143 | o  | 48      |
|    | 10 | 9.749 8317 | 310 | 9.832 2982 | 453   | 0.167 7018 | 9.917 5335 | 143 | 50 | 1 45.2  |
|    | 20 | 9.749 8627 | 310 | 9.832 3435 | 453   | 0.167 6565 | 9.917 5192 | 143 | 40 | 2 90.4  |
|    | 30 | 9.749 8937 | 309 | 9.832 3888 | 453   | 0.167 6112 | 9.917 5049 | 143 | 30 | 3 135.6 |
|    | 40 | 9.749 9246 | 310 | 9.832 4341 | 453   | 0.167 5659 | 9.917 4906 | 143 | 20 | 4 180.8 |
|    | 50 | 9.749 9556 | 310 | 9.832 4794 | 452   | 0.167 5206 | 9.917 4763 | 144 | 10 | 5 226.0 |
| 13 | o  | 9.749 9866 | 309 | 9.832 5246 | 453   | 0.167 4754 | 9.917 4619 | 143 | o  | 47      |
|    | 10 | 9.750 0175 | 310 | 9.832 5699 | 453   | 0.167 4301 | 9.917 4476 | 143 | 50 | 6 271.2 |
|    | 20 | 9.750 0485 | 309 | 9.832 6152 | 453   | 0.167 3848 | 9.917 4333 | 143 | 40 | 7 316.4 |
|    | 30 | 9.750 0794 | 310 | 9.832 6605 | 452   | 0.167 3395 | 9.917 4190 | 143 | 30 | 8 361.6 |
|    | 40 | 9.750 1104 | 309 | 9.832 7057 | 453   | 0.167 2943 | 9.917 4047 | 143 | 20 | 9 406.8 |
|    | 50 | 9.750 1413 | 310 | 9.832 7510 | 453   | 0.167 2490 | 9.917 3903 | 143 | 10 |         |
| 14 | o  | 9.750 1723 | 309 | 9.832 7963 | 453   | 0.167 2037 | 9.917 3760 | 143 | o  | 46      |
|    | 10 | 9.750 2032 | 310 | 9.832 8416 | 452   | 0.167 1584 | 9.917 3617 | 144 | 50 | 1 30.9  |
|    | 20 | 9.750 2342 | 309 | 9.832 8868 | 453   | 0.167 1132 | 9.917 3473 | 143 | 40 | 2 61.8  |
|    | 30 | 9.750 2651 | 310 | 9.832 9321 | 453   | 0.167 0679 | 9.917 3330 | 143 | 30 | 3 92.7  |
|    | 40 | 9.750 2960 | 309 | 9.832 9774 | 453   | 0.167 0226 | 9.917 3187 | 143 | 20 | 4 123.6 |
|    | 50 | 9.750 3270 | 309 | 9.833 0226 | 452   | 0.166 9774 | 9.917 3044 | 144 | 10 | 5 154.5 |
| 15 | o  | 9.750 3579 | 309 | 9.833 0679 | 452   | 0.166 9321 | 9.917 2900 | 143 | o  | 45      |
|    | 10 | 9.750 3888 | 309 | 9.833 1131 | 453   | 0.166 8869 | 9.917 2757 | 144 | 50 | 6 185.4 |
|    | 20 | 9.750 4197 | 309 | 9.833 1584 | 452   | 0.166 8416 | 9.917 2613 | 143 | 40 | 7 216.3 |
|    | 30 | 9.750 4506 | 310 | 9.833 2036 | 453   | 0.166 7964 | 9.917 2470 | 143 | 30 | 8 247.2 |
|    | 40 | 9.750 4816 | 309 | 9.833 2489 | 453   | 0.166 7511 | 9.917 2327 | 144 | 20 | 9 278.1 |
|    | 50 | 9.750 5125 | 309 | 9.833 2942 | 452   | 0.166 7058 | 9.917 2183 | 143 | 10 |         |
| 16 | o  | 9.750 5434 | 309 | 9.833 3394 | 453   | 0.166 6606 | 9.917 2040 | 144 | o  | 44      |
|    | 10 | 9.750 5743 | 309 | 9.833 3847 | 452   | 0.166 6153 | 9.917 1896 | 143 | 50 | 1 14.3  |
|    | 20 | 9.750 6052 | 309 | 9.833 4299 | 452   | 0.166 5701 | 9.917 1753 | 144 | 40 | 2 28.0  |
|    | 30 | 9.750 6361 | 309 | 9.833 4751 | 453   | 0.166 5249 | 9.917 1609 | 143 | 30 | 3 42.9  |
|    | 40 | 9.750 6670 | 309 | 9.833 5204 | 453   | 0.166 4796 | 9.917 1466 | 143 | 20 | 4 57.2  |
|    | 50 | 9.750 6979 | 308 | 9.833 5656 | 452   | 0.166 4344 | 9.917 1322 | 143 | 10 | 5 71.5  |
| 17 | o  | 9.750 7287 | 309 | 9.833 6109 | 452   | 0.166 3891 | 9.917 1179 | 144 | o  | 43      |
|    | 10 | 9.750 7596 | 309 | 9.833 6561 | 452   | 0.166 3439 | 9.917 1035 | 143 | 50 | 6 85.8  |
|    | 20 | 9.750 7905 | 309 | 9.833 7013 | 453   | 0.166 2987 | 9.917 0892 | 144 | 40 | 7 100.1 |
|    | 30 | 9.750 8214 | 309 | 9.833 7466 | 452   | 0.166 2534 | 9.917 0748 | 144 | 30 | 8 114.4 |
|    | 40 | 9.750 8523 | 309 | 9.833 7918 | 452   | 0.166 2082 | 9.917 0604 | 143 | 20 | 9 128.7 |
|    | 50 | 9.750 8831 | 308 | 9.833 8370 | 453   | 0.166 1630 | 9.917 0461 | 144 | 10 |         |
| 18 | o  | 9.750 9140 | 309 | 9.833 8823 | 452   | 0.166 1177 | 9.917 0317 | 143 | o  | 42      |
|    | 10 | 9.750 9449 | 308 | 9.833 9275 | 452   | 0.166 0725 | 9.917 0174 | 144 | 50 | 1 14.4  |
|    | 20 | 9.750 9757 | 309 | 9.833 9727 | 452   | 0.166 0273 | 9.917 0030 | 144 | 40 | 2 28.8  |
|    | 30 | 9.751 0066 | 308 | 9.834 0179 | 453   | 0.165 9821 | 9.916 9886 | 143 | 30 | 3 43.2  |
|    | 40 | 9.751 0374 | 309 | 9.834 0632 | 452   | 0.165 9368 | 9.916 9743 | 144 | 20 | 4 57.6  |
|    | 50 | 9.751 0683 | 308 | 9.834 1084 | 452   | 0.165 8916 | 9.916 9599 | 144 | 10 | 5 72.0  |
| 19 | o  | 9.751 0991 | 309 | 9.834 1536 | 452   | 0.165 8464 | 9.916 9455 | 144 | o  | 41      |
|    | 10 | 9.751 1300 | 308 | 9.834 1988 | 452   | 0.165 8012 | 9.916 9311 | 143 | 50 | 6 86.4  |
|    | 20 | 9.751 1608 | 309 | 9.834 2440 | 452   | 0.165 7560 | 9.916 9168 | 144 | 40 | 7 100.8 |
|    | 30 | 9.751 1917 | 308 | 9.834 2893 | 452   | 0.165 7107 | 9.916 9024 | 144 | 30 | 8 115.2 |
|    | 40 | 9.751 2225 | 308 | 9.834 3345 | 452   | 0.165 6655 | 9.916 8880 | 144 | 20 | 9 129.6 |
|    | 50 | 9.751 2533 | 309 | 9.834 3797 | 452   | 0.165 6203 | 9.916 8736 | 143 | 10 |         |
| 20 | o  | 9.751 2842 | 309 | 9.834 4249 | 452   | 0.165 5751 | 9.916 8593 | 143 | o  | 40      |
|    | "  | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d.  | "  |         |



|         |    | Sin          | d.  | Tang       | d. c. | Cotg       | Cos        | d.  |    |
|---------|----|--------------|-----|------------|-------|------------|------------|-----|----|
| 452     | 20 | 0 9.751 2842 | 308 | 9.834 4249 | 452   | 0.165 5751 | 9.916 8593 | 144 | 40 |
| 1 45.1  | 10 | 0 9.751 3150 | 308 | 9.834 4701 | 452   | 0.165 5299 | 9.916 8449 | 144 | 50 |
| 2 90.4  | 20 | 0 9.751 3458 | 308 | 9.834 5153 | 452   | 0.165 4847 | 9.916 8305 | 144 | 40 |
| 3 135.6 | 30 | 0 9.751 3766 | 308 | 9.834 5605 | 452   | 0.165 4395 | 9.916 8161 | 144 | 30 |
| 4 180.8 | 40 | 0 9.751 4074 | 308 | 9.834 6057 | 452   | 0.165 3943 | 9.916 8017 | 144 | 20 |
| 5 226.0 | 50 | 0 9.751 4382 | 308 | 9.834 6509 | 452   | 0.165 3491 | 9.916 7873 | 144 | 10 |
| 6 271.2 |    |              | 309 |            | 452   |            |            | 143 |    |
| 7 316.4 | 21 | 0 9.751 4691 | 308 | 9.834 6961 | 452   | 0.165 3039 | 9.916 7730 | 144 | 39 |
| 8 361.6 | 10 | 0 9.751 4999 | 308 | 9.834 7413 | 452   | 0.165 2587 | 9.916 7586 | 144 | 50 |
| 9 406.8 | 20 | 0 9.751 5307 | 308 | 9.834 7865 | 452   | 0.165 2135 | 9.916 7442 | 144 | 40 |
|         | 30 | 0 9.751 5615 | 308 | 9.834 8317 | 452   | 0.165 1683 | 9.916 7298 | 144 | 30 |
|         | 40 | 0 9.751 5923 | 308 | 9.834 8769 | 452   | 0.165 1231 | 9.916 7154 | 144 | 20 |
|         | 50 | 0 9.751 6231 | 308 | 9.834 9221 | 452   | 0.165 0779 | 9.916 7010 | 144 | 10 |
|         |    |              | 307 |            | 452   |            |            | 144 |    |
| 451     | 22 | 0 9.751 6538 | 308 | 9.834 9673 | 452   | 0.165 0327 | 9.916 6866 | 144 | 38 |
| 1 45.1  | 10 | 0 9.751 6846 | 308 | 9.835 0125 | 451   | 0.164 9875 | 9.916 6722 | 144 | 50 |
| 2 90.4  | 20 | 0 9.751 7154 | 308 | 9.835 0576 | 451   | 0.164 9424 | 9.916 6578 | 144 | 40 |
| 3 135.3 | 30 | 0 9.751 7462 | 308 | 9.835 1028 | 452   | 0.164 8972 | 9.916 6434 | 144 | 30 |
| 4 180.4 | 40 | 0 9.751 7770 | 308 | 9.835 1480 | 452   | 0.164 8520 | 9.916 6290 | 144 | 20 |
| 5 225.3 | 50 | 0 9.751 8078 | 308 | 9.835 1932 | 452   | 0.164 8068 | 9.916 6146 | 144 | 10 |
| 6 270.6 |    |              | 307 |            | 452   |            |            | 144 |    |
| 7 315.7 | 23 | 0 9.751 8385 | 308 | 9.835 2384 | 451   | 0.164 7616 | 9.916 6002 | 144 | 37 |
| 8 360.8 | 10 | 0 9.751 8693 | 308 | 9.835 2835 | 452   | 0.164 7165 | 9.916 5858 | 145 | 50 |
| 9 405.9 | 20 | 0 9.751 9001 | 307 | 9.835 3287 | 452   | 0.164 6713 | 9.916 5713 | 144 | 40 |
|         | 30 | 0 9.751 9308 | 308 | 9.835 3739 | 452   | 0.164 6261 | 9.916 5569 | 144 | 30 |
|         | 40 | 0 9.751 9616 | 308 | 9.835 4191 | 452   | 0.164 5809 | 9.916 5425 | 144 | 20 |
|         | 50 | 0 9.751 9923 | 308 | 9.835 4642 | 451   | 0.164 5358 | 9.916 5281 | 144 | 10 |
|         |    |              | 308 |            | 452   |            |            | 144 |    |
| 309     | 24 | 0 9.752 0231 | 307 | 9.835 5094 | 452   | 0.164 4906 | 9.916 5137 | 144 | 36 |
| 1 30.9  | 10 | 0 9.752 0538 | 308 | 9.835 5546 | 451   | 0.164 4454 | 9.916 4993 | 144 | 50 |
| 2 61.6  | 20 | 0 9.752 0846 | 307 | 9.835 5997 | 452   | 0.164 4003 | 9.916 4849 | 145 | 40 |
| 3 92.7  | 30 | 0 9.752 1153 | 308 | 9.835 6449 | 452   | 0.164 3551 | 9.916 4704 | 144 | 30 |
| 4 123.6 | 40 | 0 9.752 1461 | 308 | 9.835 6900 | 451   | 0.164 3100 | 9.916 4560 | 144 | 20 |
| 5 154.5 | 50 | 0 9.752 1768 | 307 | 9.835 7352 | 452   | 0.164 2648 | 9.916 4416 | 144 | 10 |
| 6 185.4 |    |              | 307 |            | 452   |            |            | 144 |    |
| 7 216.3 | 25 | 0 9.752 2075 | 308 | 9.835 7804 | 451   | 0.164 2196 | 9.916 4272 | 145 | 35 |
| 8 247.2 | 10 | 0 9.752 2383 | 307 | 9.835 8255 | 452   | 0.164 1745 | 9.916 4127 | 144 | 50 |
| 9 278.1 | 20 | 0 9.752 2690 | 307 | 9.835 8707 | 451   | 0.164 1293 | 9.916 3983 | 144 | 40 |
|         | 30 | 0 9.752 2997 | 307 | 9.835 9158 | 452   | 0.164 0842 | 9.916 3839 | 145 | 30 |
|         | 40 | 0 9.752 3304 | 307 | 9.835 9610 | 452   | 0.164 0390 | 9.916 3694 | 144 | 20 |
|         | 50 | 0 9.752 3611 | 307 | 9.836 0061 | 451   | 0.163 9939 | 9.916 3550 | 144 | 10 |
|         |    |              | 308 |            | 452   |            |            | 144 |    |
| 308     | 26 | 0 9.752 3919 | 307 | 9.836 0513 | 451   | 0.163 9487 | 9.916 3406 | 145 | 34 |
| 1 30.8  | 10 | 0 9.752 4226 | 307 | 9.836 0964 | 452   | 0.163 9036 | 9.916 3261 | 144 | 50 |
| 2 61.6  | 20 | 0 9.752 4533 | 307 | 9.836 1416 | 452   | 0.163 8584 | 9.916 3117 | 144 | 40 |
| 3 92.4  | 30 | 0 9.752 4840 | 307 | 9.836 1867 | 451   | 0.163 8133 | 9.916 2973 | 144 | 30 |
| 4 123.2 | 40 | 0 9.752 5147 | 307 | 9.836 2318 | 451   | 0.163 7682 | 9.916 2828 | 144 | 20 |
| 5 154.0 | 50 | 0 9.752 5454 | 307 | 9.836 2770 | 452   | 0.163 7230 | 9.916 2684 | 145 | 10 |
| 6 184.8 |    |              | 307 |            | 451   |            |            | 144 |    |
| 7 215.6 | 27 | 0 9.752 5761 | 307 | 9.836 3221 | 452   | 0.163 6779 | 9.916 2539 | 144 | 33 |
| 8 246.4 | 10 | 0 9.752 6068 | 307 | 9.836 3673 | 451   | 0.163 6327 | 9.916 2395 | 144 | 50 |
| 9 277.2 | 20 | 0 9.752 6375 | 307 | 9.836 4124 | 451   | 0.163 5876 | 9.916 2251 | 145 | 40 |
|         | 30 | 0 9.752 6681 | 306 | 9.836 4575 | 451   | 0.163 5425 | 9.916 2106 | 144 | 30 |
|         | 40 | 0 9.752 6988 | 307 | 9.836 5027 | 452   | 0.163 4973 | 9.916 1962 | 145 | 20 |
|         | 50 | 0 9.752 7295 | 307 | 9.836 5478 | 451   | 0.163 4522 | 9.916 1817 | 144 | 10 |
|         |    |              | 307 |            | 451   |            |            | 144 |    |
| 307     | 28 | 0 9.752 7602 | 306 | 9.836 5929 | 451   | 0.163 4071 | 9.916 1673 | 145 | 32 |
| 1 30.7  | 10 | 0 9.752 7908 | 307 | 9.836 6380 | 452   | 0.163 3620 | 9.916 1528 | 145 | 50 |
| 2 61.4  | 20 | 0 9.752 8215 | 307 | 9.836 6832 | 452   | 0.163 3168 | 9.916 1383 | 144 | 40 |
| 3 92.1  | 30 | 0 9.752 8522 | 306 | 9.836 7283 | 451   | 0.163 2717 | 9.916 1239 | 145 | 30 |
| 4 122.8 | 40 | 0 9.752 8828 | 307 | 9.836 7734 | 451   | 0.163 2266 | 9.916 1094 | 144 | 20 |
| 5 153.5 | 50 | 0 9.752 9135 | 307 | 9.836 8185 | 451   | 0.163 1815 | 9.916 0950 | 145 | 10 |
| 6 184.2 |    |              | 307 |            | 451   |            |            | 144 |    |
| 7 214.9 | 29 | 0 9.752 9442 | 306 | 9.836 8636 | 452   | 0.163 1364 | 9.916 0805 | 144 | 31 |
| 8 245.6 | 10 | 0 9.752 9748 | 307 | 9.836 9088 | 451   | 0.163 0912 | 9.916 0661 | 145 | 50 |
| 9 276.3 | 20 | 0 9.753 0055 | 307 | 9.836 9539 | 451   | 0.163 0461 | 9.916 0516 | 145 | 40 |
|         | 30 | 0 9.753 0361 | 306 | 9.836 9990 | 451   | 0.163 0010 | 9.916 0371 | 144 | 30 |
|         | 40 | 0 9.753 0667 | 307 | 9.837 0441 | 451   | 0.162 9559 | 9.916 0227 | 145 | 20 |
|         | 50 | 0 9.753 0974 | 306 | 9.837 0892 | 451   | 0.162 9108 | 9.916 0082 | 145 | 10 |
|         |    |              | 306 |            | 451   |            |            | 145 |    |
| 144     | 30 | 0 9.753 1280 |     | 9.837 1343 |       | 0.162 8657 | 9.915 9937 |     | 80 |
| 1 14.4  |    |              |     |            |       |            |            |     |    |
| 2 28.8  |    |              |     |            |       |            |            |     |    |
| 3 43.2  |    |              |     |            |       |            |            |     |    |
| 4 57.6  |    |              |     |            |       |            |            |     |    |
| 5 72.0  |    |              |     |            |       |            |            |     |    |
| 6 86.4  |    |              |     |            |       |            |            |     |    |
| 7 100.8 |    |              |     |            |       |            |            |     |    |
| 8 115.2 |    |              |     |            |       |            |            |     |    |
| 9 129.6 |    |              |     |            |       |            |            |     |    |
|         |    | Cos          | d.  | Cotg       | d. c. | Tang       | Sin        | d.  |    |



|    | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Con        | d.  | "  |    |
|----|----|------------|-----|------------|-------|------------|------------|-----|----|----|
| 0  | 0  | 9.753 1280 | 307 | 9.837 1343 | 451   | 0.162 8657 | 9.915 9937 | 145 | 0  | 30 |
|    | 10 | 9.753 1587 | 306 | 9.837 1794 | 451   | 0.162 8206 | 9.915 9792 | 144 | 50 |    |
|    | 20 | 9.753 1893 | 306 | 9.837 2245 | 451   | 0.162 7755 | 9.915 9648 | 145 | 40 |    |
|    | 30 | 9.753 2199 | 306 | 9.837 2696 | 451   | 0.162 7304 | 9.915 9503 | 145 | 30 |    |
|    | 40 | 9.753 2505 | 307 | 9.837 3147 | 451   | 0.162 6853 | 9.915 9358 | 145 | 20 |    |
|    | 50 | 9.753 2812 | 306 | 9.837 3598 | 451   | 0.162 6402 | 9.915 9213 | 144 | 10 |    |
| 1  | 0  | 9.753 3118 | 306 | 9.837 4049 | 451   | 0.162 5951 | 9.915 9069 | 145 | 0  | 29 |
|    | 10 | 9.753 3424 | 306 | 9.837 4500 | 451   | 0.162 5500 | 9.915 8924 | 145 | 50 |    |
|    | 20 | 9.753 3730 | 306 | 9.837 4951 | 451   | 0.162 5049 | 9.915 8779 | 145 | 40 |    |
|    | 30 | 9.753 4036 | 306 | 9.837 5402 | 451   | 0.162 4598 | 9.915 8634 | 145 | 30 |    |
|    | 40 | 9.753 4342 | 306 | 9.837 5853 | 451   | 0.162 4147 | 9.915 8489 | 145 | 20 |    |
|    | 50 | 9.753 4648 | 306 | 9.837 6304 | 451   | 0.162 3696 | 9.915 8344 | 145 | 10 |    |
| 2  | 0  | 9.753 4954 | 306 | 9.837 6755 | 451   | 0.162 3245 | 9.915 8200 | 144 | 0  | 28 |
|    | 10 | 9.753 5260 | 306 | 9.837 7206 | 450   | 0.162 2794 | 9.915 8055 | 145 | 50 |    |
|    | 20 | 9.753 5566 | 306 | 9.837 7656 | 450   | 0.162 2344 | 9.915 7910 | 145 | 40 |    |
|    | 30 | 9.753 5872 | 306 | 9.837 8107 | 451   | 0.162 1893 | 9.915 7765 | 145 | 30 |    |
|    | 40 | 9.753 6178 | 306 | 9.837 8558 | 451   | 0.162 1442 | 9.915 7620 | 145 | 20 |    |
|    | 50 | 9.753 6484 | 306 | 9.837 9009 | 451   | 0.162 0991 | 9.915 7475 | 145 | 10 |    |
| 3  | 0  | 9.753 6790 | 305 | 9.837 9460 | 450   | 0.162 0540 | 9.915 7330 | 145 | 0  | 27 |
|    | 10 | 9.753 7095 | 306 | 9.837 9910 | 451   | 0.162 0090 | 9.915 7185 | 145 | 50 |    |
|    | 20 | 9.753 7401 | 306 | 9.838 0361 | 451   | 0.161 9639 | 9.915 7040 | 145 | 40 |    |
|    | 30 | 9.753 7707 | 305 | 9.838 0812 | 450   | 0.161 9188 | 9.915 6895 | 145 | 30 |    |
|    | 40 | 9.753 8012 | 305 | 9.838 1262 | 450   | 0.161 8738 | 9.915 6750 | 145 | 20 |    |
|    | 50 | 9.753 8318 | 306 | 9.838 1713 | 451   | 0.161 8287 | 9.915 6605 | 145 | 10 |    |
| 4  | 0  | 9.753 8624 | 305 | 9.838 2164 | 450   | 0.161 7836 | 9.915 6460 | 145 | 0  | 26 |
|    | 10 | 9.753 8929 | 306 | 9.838 2614 | 451   | 0.161 7386 | 9.915 6315 | 145 | 50 |    |
|    | 20 | 9.753 9235 | 305 | 9.838 3065 | 451   | 0.161 6935 | 9.915 6170 | 145 | 40 |    |
|    | 30 | 9.753 9540 | 305 | 9.838 3516 | 450   | 0.161 6484 | 9.915 6025 | 145 | 30 |    |
|    | 40 | 9.753 9846 | 305 | 9.838 3966 | 451   | 0.161 6034 | 9.915 5879 | 145 | 20 |    |
|    | 50 | 9.754 0151 | 306 | 9.838 4417 | 450   | 0.161 5583 | 9.915 5734 | 145 | 10 |    |
| 5  | 0  | 9.754 0457 | 305 | 9.838 4867 | 451   | 0.161 5133 | 9.915 5589 | 145 | 0  | 25 |
|    | 10 | 9.754 0762 | 305 | 9.838 5318 | 451   | 0.161 4682 | 9.915 5444 | 145 | 50 |    |
|    | 20 | 9.754 1067 | 306 | 9.838 5769 | 450   | 0.161 4231 | 9.915 5299 | 145 | 40 |    |
|    | 30 | 9.754 1373 | 305 | 9.838 6219 | 451   | 0.161 3781 | 9.915 5154 | 145 | 30 |    |
|    | 40 | 9.754 1678 | 305 | 9.838 6670 | 450   | 0.161 3330 | 9.915 5008 | 146 | 20 |    |
|    | 50 | 9.754 1983 | 305 | 9.838 7120 | 451   | 0.161 2880 | 9.915 4863 | 145 | 10 |    |
| 6  | 0  | 9.754 2288 | 306 | 9.838 7571 | 450   | 0.161 2429 | 9.915 4718 | 145 | 0  | 24 |
|    | 10 | 9.754 2594 | 305 | 9.838 8021 | 450   | 0.161 1979 | 9.915 4573 | 146 | 50 |    |
|    | 20 | 9.754 2899 | 305 | 9.838 8471 | 451   | 0.161 1529 | 9.915 4427 | 145 | 40 |    |
|    | 30 | 9.754 3204 | 305 | 9.838 8922 | 450   | 0.161 1078 | 9.915 4282 | 145 | 30 |    |
|    | 40 | 9.754 3509 | 305 | 9.838 9372 | 451   | 0.161 0628 | 9.915 4137 | 146 | 20 |    |
|    | 50 | 9.754 3814 | 305 | 9.838 9823 | 450   | 0.161 0177 | 9.915 3991 | 145 | 10 |    |
| 7  | 0  | 9.754 4119 | 305 | 9.839 0273 | 450   | 0.160 9727 | 9.915 3846 | 145 | 0  | 23 |
|    | 10 | 9.754 4424 | 305 | 9.839 0723 | 451   | 0.160 9277 | 9.915 3701 | 146 | 50 |    |
|    | 20 | 9.754 4729 | 305 | 9.839 1174 | 450   | 0.160 8826 | 9.915 3555 | 145 | 40 |    |
|    | 30 | 9.754 5034 | 305 | 9.839 1624 | 450   | 0.160 8376 | 9.915 3410 | 145 | 30 |    |
|    | 40 | 9.754 5339 | 305 | 9.839 2074 | 451   | 0.160 7926 | 9.915 3265 | 146 | 20 |    |
|    | 50 | 9.754 5644 | 305 | 9.839 2525 | 450   | 0.160 7475 | 9.915 3119 | 145 | 10 |    |
| 8  | 0  | 9.754 5949 | 305 | 9.839 2975 | 450   | 0.160 7025 | 9.915 2974 | 146 | 0  | 22 |
|    | 10 | 9.754 6254 | 304 | 9.839 3425 | 450   | 0.160 6575 | 9.915 2828 | 145 | 50 |    |
|    | 20 | 9.754 6558 | 305 | 9.839 3875 | 451   | 0.160 6125 | 9.915 2683 | 146 | 40 |    |
|    | 30 | 9.754 6863 | 305 | 9.839 4326 | 450   | 0.160 5674 | 9.915 2537 | 145 | 30 |    |
|    | 40 | 9.754 7168 | 305 | 9.839 4776 | 450   | 0.160 5224 | 9.915 2392 | 146 | 20 |    |
|    | 50 | 9.754 7473 | 304 | 9.839 5226 | 450   | 0.160 4774 | 9.915 2246 | 145 | 10 |    |
| 9  | 0  | 9.754 7777 | 305 | 9.839 5676 | 450   | 0.160 4324 | 9.915 2101 | 146 | 0  | 21 |
|    | 10 | 9.754 8082 | 304 | 9.839 6126 | 450   | 0.160 3874 | 9.915 1955 | 145 | 50 |    |
|    | 20 | 9.754 8386 | 305 | 9.839 6576 | 451   | 0.160 3424 | 9.915 1810 | 146 | 40 |    |
|    | 30 | 9.754 8691 | 304 | 9.839 7027 | 450   | 0.160 2973 | 9.915 1664 | 145 | 30 |    |
|    | 40 | 9.754 8995 | 305 | 9.839 7477 | 450   | 0.160 2523 | 9.915 1519 | 146 | 20 |    |
|    | 50 | 9.754 9300 | 304 | 9.839 7927 | 450   | 0.160 2073 | 9.915 1373 | 145 | 10 |    |
| 10 | 0  | 9.754 9604 | 304 | 9.839 8377 | 450   | 0.160 1623 | 9.915 1228 | 145 | 0  | 20 |
|    | "  | Con        | d.  | Cotg       | d. c. | Tang       | Sin        | d.  | "  |    |







|    | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Coa        | d.  | "  |    |
|----|----|------------|-----|------------|-------|------------|------------|-----|----|----|
| 50 | 0  | 9.756 7815 | 303 | 9.842 5351 | 449   | 0.157 4649 | 9.914 2464 | 147 | 0  | 10 |
|    | 10 | 9.756 8118 | 302 | 9.842 5800 | 450   | 0.157 4200 | 9.914 2317 | 146 | 50 |    |
|    | 20 | 9.756 8420 | 303 | 9.842 6250 | 449   | 0.157 3750 | 9.914 2171 | 147 | 40 |    |
|    | 30 | 9.756 8723 | 302 | 9.842 6699 | 449   | 0.157 3301 | 9.914 2024 | 147 | 30 |    |
|    | 40 | 9.756 9025 | 303 | 9.842 7148 | 449   | 0.157 2852 | 9.914 1877 | 146 | 20 |    |
|    | 50 | 9.756 9328 | 302 | 9.842 7597 | 449   | 0.157 2403 | 9.914 1731 | 147 | 10 |    |
| 51 | 0  | 9.756 9630 | 302 | 9.842 8046 | 449   | 0.157 1954 | 9.914 1584 | 146 | 0  | 9  |
|    | 10 | 9.756 9932 | 303 | 9.842 8495 | 449   | 0.157 1505 | 9.914 1438 | 147 | 50 |    |
|    | 20 | 9.757 0235 | 302 | 9.842 8944 | 449   | 0.157 1056 | 9.914 1291 | 147 | 40 |    |
|    | 30 | 9.757 0537 | 302 | 9.842 9393 | 448   | 0.157 0607 | 9.914 1144 | 147 | 30 |    |
|    | 40 | 9.757 0839 | 302 | 9.842 9841 | 449   | 0.157 0159 | 9.914 0998 | 147 | 20 |    |
|    | 50 | 9.757 1141 | 303 | 9.843 0290 | 449   | 0.156 9710 | 9.914 0851 | 147 | 10 |    |
| 52 | 0  | 9.757 1444 | 302 | 9.843 0739 | 449   | 0.156 9261 | 9.914 0704 | 146 | 0  | 8  |
|    | 10 | 9.757 1746 | 302 | 9.843 1188 | 449   | 0.156 8812 | 9.914 0558 | 147 | 50 |    |
|    | 20 | 9.757 2048 | 302 | 9.843 1637 | 449   | 0.156 8363 | 9.914 0411 | 147 | 40 |    |
|    | 30 | 9.757 2350 | 302 | 9.843 2086 | 449   | 0.156 7914 | 9.914 0264 | 147 | 30 |    |
|    | 40 | 9.757 2652 | 302 | 9.843 2535 | 449   | 0.156 7465 | 9.914 0117 | 146 | 20 |    |
|    | 50 | 9.757 2954 | 302 | 9.843 2984 | 448   | 0.156 7016 | 9.913 9971 | 147 | 10 |    |
| 53 | 0  | 9.757 3256 | 302 | 9.843 3432 | 449   | 0.156 6568 | 9.913 9824 | 147 | 0  | 7  |
|    | 10 | 9.757 3558 | 302 | 9.843 3881 | 449   | 0.156 6119 | 9.913 9677 | 147 | 50 |    |
|    | 20 | 9.757 3860 | 302 | 9.843 4330 | 449   | 0.156 5670 | 9.913 9530 | 147 | 40 |    |
|    | 30 | 9.757 4162 | 302 | 9.843 4779 | 448   | 0.156 5221 | 9.913 9383 | 146 | 30 |    |
|    | 40 | 9.757 4464 | 302 | 9.843 5227 | 449   | 0.156 4773 | 9.913 9237 | 147 | 20 |    |
|    | 50 | 9.757 4766 | 302 | 9.843 5676 | 449   | 0.156 4324 | 9.913 9090 | 147 | 10 |    |
| 54 | 0  | 9.757 5068 | 302 | 9.843 6125 | 449   | 0.156 3875 | 9.913 8943 | 147 | 0  | 6  |
|    | 10 | 9.757 5370 | 301 | 9.843 6574 | 448   | 0.156 3426 | 9.913 8796 | 147 | 50 |    |
|    | 20 | 9.757 5671 | 302 | 9.843 7022 | 449   | 0.156 2978 | 9.913 8649 | 147 | 40 |    |
|    | 30 | 9.757 5973 | 302 | 9.843 7471 | 449   | 0.156 2529 | 9.913 8502 | 147 | 30 |    |
|    | 40 | 9.757 6275 | 301 | 9.843 7920 | 448   | 0.156 2080 | 9.913 8355 | 147 | 20 |    |
|    | 50 | 9.757 6576 | 302 | 9.843 8368 | 449   | 0.156 1632 | 9.913 8208 | 147 | 10 |    |
| 55 | 0  | 9.757 6878 | 302 | 9.843 8817 | 448   | 0.156 1183 | 9.913 8061 | 147 | 0  | 5  |
|    | 10 | 9.757 7180 | 301 | 9.843 9265 | 449   | 0.156 0735 | 9.913 7914 | 147 | 50 |    |
|    | 20 | 9.757 7481 | 302 | 9.843 9714 | 449   | 0.156 0286 | 9.913 7767 | 147 | 40 |    |
|    | 30 | 9.757 7783 | 301 | 9.844 0163 | 448   | 0.155 9837 | 9.913 7620 | 147 | 30 |    |
|    | 40 | 9.757 8084 | 302 | 9.844 0611 | 449   | 0.155 9389 | 9.913 7473 | 147 | 20 |    |
|    | 50 | 9.757 8386 | 301 | 9.844 1060 | 448   | 0.155 8940 | 9.913 7326 | 147 | 10 |    |
|    | 0  | 9.757 8687 | 302 | 9.844 1508 | 449   | 0.155 8492 | 9.913 7179 | 147 | 0  | 4  |
|    | 10 | 9.757 8989 | 301 | 9.844 1957 | 448   | 0.155 8043 | 9.913 7032 | 147 | 50 |    |
|    | 20 | 9.757 9290 | 301 | 9.844 2405 | 449   | 0.155 7595 | 9.913 6885 | 147 | 40 |    |
|    | 30 | 9.757 9591 | 302 | 9.844 2854 | 448   | 0.155 7146 | 9.913 6738 | 147 | 30 |    |
|    | 40 | 9.757 9893 | 302 | 9.844 3302 | 449   | 0.155 6698 | 9.913 6591 | 147 | 20 |    |
|    | 50 | 9.758 0194 | 301 | 9.844 3751 | 448   | 0.155 6249 | 9.913 6444 | 148 | 10 |    |
| 7  | 0  | 9.758 0495 | 302 | 9.844 4199 | 448   | 0.155 5801 | 9.913 6296 | 147 | 0  | 3  |
|    | 10 | 9.758 0797 | 301 | 9.844 4647 | 449   | 0.155 5353 | 9.913 6149 | 147 | 50 |    |
|    | 20 | 9.758 1098 | 301 | 9.844 5096 | 448   | 0.155 4904 | 9.913 6002 | 147 | 40 |    |
|    | 30 | 9.758 1399 | 301 | 9.844 5544 | 448   | 0.155 4456 | 9.913 5855 | 147 | 30 |    |
|    | 40 | 9.758 1700 | 301 | 9.844 5992 | 449   | 0.155 4008 | 9.913 5708 | 148 | 20 |    |
|    | 50 | 9.758 2001 | 301 | 9.844 6441 | 448   | 0.155 3559 | 9.913 5560 | 147 | 10 |    |
| 8  | 0  | 9.758 2302 | 301 | 9.844 6889 | 448   | 0.155 3111 | 9.913 5413 | 147 | 0  | 2  |
|    | 10 | 9.758 2603 | 301 | 9.844 7337 | 449   | 0.155 2663 | 9.913 5266 | 147 | 50 |    |
|    | 20 | 9.758 2904 | 301 | 9.844 7786 | 448   | 0.155 2214 | 9.913 5119 | 148 | 40 |    |
|    | 30 | 9.758 3205 | 301 | 9.844 8234 | 448   | 0.155 1766 | 9.913 4971 | 147 | 30 |    |
|    | 40 | 9.758 3506 | 301 | 9.844 8682 | 449   | 0.155 1318 | 9.913 4824 | 147 | 20 |    |
|    | 50 | 9.758 3807 | 301 | 9.844 9131 | 448   | 0.155 0869 | 9.913 4677 | 147 | 10 |    |
| 9  | 0  | 9.758 4108 | 301 | 9.844 9579 | 448   | 0.155 0421 | 9.913 4530 | 148 | 0  | 1  |
|    | 10 | 9.758 4409 | 301 | 9.845 0027 | 448   | 0.154 9973 | 9.913 4382 | 147 | 50 |    |
|    | 20 | 9.758 4710 | 301 | 9.845 0475 | 448   | 0.154 9525 | 9.913 4235 | 148 | 40 |    |
|    | 30 | 9.758 5011 | 301 | 9.845 0923 | 449   | 0.154 9077 | 9.913 4087 | 147 | 30 |    |
|    | 40 | 9.758 5312 | 300 | 9.845 1372 | 448   | 0.154 8628 | 9.913 3940 | 147 | 20 |    |
|    | 50 | 9.758 5612 | 301 | 9.845 1820 | 448   | 0.154 8180 | 9.913 3793 | 148 | 10 |    |
| 0  | 0  | 9.758 5913 |     | 9.845 2268 |       | 0.154 7732 | 9.913 3645 |     | 0  | 0  |
|    | "  | Coa        | d.  | Cotg       | d. c. | Tang       | Sin        | d.  | "  |    |

448

1 44.8

2 49.6

3 134.4

4 179.2

5 124.0

6 168.8

7 313.6

8 358.4

9 403.2

303

1 30.3

2 60.6

3 90.9

4 121.2

5 151.5

6 181.8

7 212.1

8 242.4

9 272.7

302

1 30.2

2 60.4

3 90.6

4 120.8

5 151.0

6 181.2

7 211.4

8 241.6

9 271.8

301

1 30.1

2 60.2

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4 120.4

5 150.5

6 180.6

7 210.7

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147

1 14.7

2 29.4

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4 58.8

5 73.5

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7 102.9

8 117.6

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148

1 14.8

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4 59.2

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6 88.8

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9 133.2



|         |    | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d.  |    |    |
|---------|----|------------|-----|------------|-------|------------|------------|-----|----|----|
| 448     | 0  | 9.758 5913 | 301 | 9.845 2268 | 448   | 0.154 7732 | 9.913 3645 | 147 | 0  | 60 |
| 1 44.3  | 10 | 9.758 6214 | 300 | 9.845 2716 | 448   | 0.154 7284 | 9.913 3498 | 148 | 50 |    |
| 2 89.6  | 20 | 9.758 6514 | 301 | 9.845 3164 | 448   | 0.154 6836 | 9.913 3350 | 147 | 40 |    |
| 3 134.4 | 30 | 9.758 6815 | 301 | 9.845 3612 | 448   | 0.154 6388 | 9.913 3203 | 148 | 30 |    |
| 4 179.2 | 40 | 9.758 7116 | 300 | 9.845 4060 | 448   | 0.154 5940 | 9.913 3055 | 147 | 20 |    |
| 5 224.0 | 50 | 9.758 7416 | 301 | 9.845 4508 | 448   | 0.154 5492 | 9.913 2908 | 148 | 10 |    |
| 6 268.8 | 1  | 9.758 7717 | 300 | 9.845 4956 | 448   | 0.154 5044 | 9.913 2760 | 147 | 0  | 59 |
| 7 313.6 | 10 | 9.758 8017 | 301 | 9.845 5404 | 448   | 0.154 4596 | 9.913 2613 | 148 | 50 |    |
| 8 358.4 | 20 | 9.758 8318 | 300 | 9.845 5852 | 448   | 0.154 4148 | 9.913 2465 | 147 | 40 |    |
| 9 403.2 | 30 | 9.758 8618 | 301 | 9.845 6300 | 448   | 0.154 3700 | 9.913 2318 | 148 | 30 |    |
|         | 40 | 9.758 8918 | 300 | 9.845 6748 | 448   | 0.154 3252 | 9.913 2170 | 147 | 20 |    |
|         | 50 | 9.758 9219 | 301 | 9.845 7196 | 448   | 0.154 2804 | 9.913 2023 | 148 | 10 |    |
| 301     | 2  | 9.758 9519 | 300 | 9.845 7644 | 448   | 0.154 2356 | 9.913 1875 | 147 | 0  | 58 |
| 1 30.1  | 10 | 9.758 9819 | 301 | 9.845 8092 | 448   | 0.154 1908 | 9.913 1727 | 148 | 50 |    |
| 2 60.2  | 20 | 9.759 0120 | 300 | 9.845 8540 | 448   | 0.154 1460 | 9.913 1580 | 147 | 40 |    |
| 3 90.3  | 30 | 9.759 0420 | 301 | 9.845 8988 | 448   | 0.154 1012 | 9.913 1432 | 148 | 30 |    |
| 4 120.4 | 40 | 9.759 0720 | 300 | 9.845 9436 | 448   | 0.154 0564 | 9.913 1284 | 147 | 20 |    |
| 5 150.5 | 50 | 9.759 1020 | 301 | 9.845 9884 | 448   | 0.154 0116 | 9.913 1137 | 148 | 10 |    |
| 6 180.6 | 3  | 9.759 1321 | 300 | 9.846 0332 | 447   | 0.153 9668 | 9.913 0989 | 147 | 0  | 57 |
| 7 210.7 | 10 | 9.759 1621 | 301 | 9.846 0779 | 448   | 0.153 9221 | 9.913 0841 | 148 | 50 |    |
| 8 240.8 | 20 | 9.759 1921 | 300 | 9.846 1227 | 448   | 0.153 8773 | 9.913 0694 | 147 | 40 |    |
| 9 270.9 | 30 | 9.759 2221 | 301 | 9.846 1675 | 448   | 0.153 8325 | 9.913 0546 | 148 | 30 |    |
|         | 40 | 9.759 2521 | 300 | 9.846 2123 | 448   | 0.153 7877 | 9.913 0398 | 147 | 20 |    |
| 300     | 50 | 9.759 2821 | 301 | 9.846 2571 | 447   | 0.153 7429 | 9.913 0250 | 148 | 10 |    |
| 1 30.0  | 4  | 9.759 3121 | 300 | 9.846 3018 | 448   | 0.153 6982 | 9.913 0102 | 147 | 0  | 56 |
| 2 60.0  | 10 | 9.759 3421 | 301 | 9.846 3466 | 448   | 0.153 6534 | 9.912 9955 | 148 | 50 |    |
| 3 90.0  | 20 | 9.759 3721 | 300 | 9.846 3914 | 448   | 0.153 6086 | 9.912 9807 | 147 | 40 |    |
| 4 120.0 | 30 | 9.759 4021 | 301 | 9.846 4362 | 447   | 0.153 5638 | 9.912 9659 | 148 | 30 |    |
| 5 150.0 | 40 | 9.759 4320 | 300 | 9.846 4809 | 448   | 0.153 5191 | 9.912 9511 | 147 | 20 |    |
| 6 180.0 | 50 | 9.759 4620 | 301 | 9.846 5257 | 448   | 0.153 4743 | 9.912 9363 | 148 | 10 |    |
| 7 210.0 | 5  | 9.759 4920 | 300 | 9.846 5705 | 447   | 0.153 4295 | 9.912 9215 | 147 | 0  | 55 |
| 8 240.0 | 10 | 9.759 5220 | 301 | 9.846 6152 | 448   | 0.153 3848 | 9.912 9068 | 148 | 50 |    |
| 9 270.0 | 20 | 9.759 5520 | 300 | 9.846 6600 | 448   | 0.153 3400 | 9.912 8920 | 147 | 40 |    |
| 209     | 30 | 9.759 5819 | 301 | 9.846 7048 | 447   | 0.153 2952 | 9.912 8772 | 148 | 30 |    |
| 1 29.9  | 40 | 9.759 6119 | 300 | 9.846 7495 | 448   | 0.153 2505 | 9.912 8624 | 147 | 20 |    |
| 2 59.8  | 50 | 9.759 6419 | 301 | 9.846 7943 | 447   | 0.153 2057 | 9.912 8476 | 148 | 10 |    |
| 3 89.7  | 6  | 9.759 6718 | 300 | 9.846 8390 | 448   | 0.153 1610 | 9.912 8328 | 147 | 0  | 54 |
| 4 119.6 | 10 | 9.759 7018 | 301 | 9.846 8838 | 447   | 0.153 1162 | 9.912 8180 | 148 | 50 |    |
| 5 149.5 | 20 | 9.759 7317 | 300 | 9.846 9285 | 448   | 0.153 0715 | 9.912 8032 | 147 | 40 |    |
| 6 179.4 | 30 | 9.759 7617 | 301 | 9.846 9733 | 447   | 0.153 0267 | 9.912 7884 | 148 | 30 |    |
| 7 209.3 | 40 | 9.759 7916 | 300 | 9.847 0180 | 448   | 0.152 9820 | 9.912 7736 | 147 | 20 |    |
| 8 239.2 | 50 | 9.759 8216 | 301 | 9.847 0628 | 447   | 0.152 9372 | 9.912 7588 | 148 | 10 |    |
| 9 269.1 | 7  | 9.759 8515 | 300 | 9.847 1075 | 448   | 0.152 8925 | 9.912 7440 | 147 | 0  | 53 |
| 147     | 10 | 9.759 8814 | 301 | 9.847 1523 | 447   | 0.152 8477 | 9.912 7292 | 148 | 50 |    |
| 1 14.7  | 20 | 9.759 9114 | 300 | 9.847 1970 | 448   | 0.152 8030 | 9.912 7144 | 147 | 40 |    |
| 2 29.4  | 30 | 9.759 9413 | 301 | 9.847 2418 | 447   | 0.152 7582 | 9.912 6995 | 148 | 30 |    |
| 3 44.1  | 40 | 9.759 9712 | 300 | 9.847 2865 | 448   | 0.152 7135 | 9.912 6847 | 147 | 20 |    |
| 4 58.8  | 50 | 9.760 0012 | 301 | 9.847 3313 | 447   | 0.152 6687 | 9.912 6699 | 148 | 10 |    |
| 5 73.5  | 8  | 9.760 0311 | 300 | 9.847 3760 | 448   | 0.152 6240 | 9.912 6551 | 147 | 0  | 52 |
| 6 88.2  | 10 | 9.760 0610 | 301 | 9.847 4207 | 447   | 0.152 5793 | 9.912 6403 | 148 | 50 |    |
| 7 102.9 | 20 | 9.760 0909 | 300 | 9.847 4655 | 448   | 0.152 5345 | 9.912 6255 | 147 | 40 |    |
| 8 117.6 | 30 | 9.760 1208 | 301 | 9.847 5102 | 447   | 0.152 4898 | 9.912 6106 | 148 | 30 |    |
| 9 132.3 | 40 | 9.760 1508 | 300 | 9.847 5549 | 448   | 0.152 4451 | 9.912 5958 | 147 | 20 |    |
|         | 50 | 9.760 1807 | 301 | 9.847 5997 | 447   | 0.152 4003 | 9.912 5810 | 148 | 10 |    |
| 148     | 9  | 9.760 2106 | 300 | 9.847 6444 | 448   | 0.152 3556 | 9.912 5662 | 147 | 0  | 51 |
| 1 14.8  | 10 | 9.760 2405 | 301 | 9.847 6891 | 447   | 0.152 3109 | 9.912 5514 | 148 | 50 |    |
| 2 29.6  | 20 | 9.760 2704 | 300 | 9.847 7338 | 448   | 0.152 2662 | 9.912 5365 | 147 | 40 |    |
| 3 44.4  | 30 | 9.760 3003 | 301 | 9.847 7786 | 447   | 0.152 2214 | 9.912 5217 | 148 | 30 |    |
| 4 59.2  | 40 | 9.760 3302 | 300 | 9.847 8233 | 448   | 0.152 1767 | 9.912 5069 | 147 | 20 |    |
| 5 74.0  | 50 | 9.760 3600 | 301 | 9.847 8680 | 447   | 0.152 1320 | 9.912 4920 | 148 | 10 |    |
| 6 88.8  | 10 | 9.760 3899 | 300 | 9.847 9127 | 448   | 0.152 0873 | 9.912 4772 | 147 | 0  | 50 |
| 7 103.6 |    |            |     |            |       |            |            |     |    |    |
| 8 118.4 |    |            |     |            |       |            |            |     |    |    |
| 9 133.2 |    |            |     |            |       |            |            |     |    |    |
|         |    | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d.  |    |    |



|    | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d.  | "  |         |
|----|----|------------|-----|------------|-------|------------|------------|-----|----|---------|
| 10 | 0  | 9.760 3899 | 299 | 9.847 9127 | 447   | 0.152 0873 | 9.912 4772 | 148 | 0  | 50      |
|    | 10 | 9.760 4198 | 299 | 9.847 9574 | 448   | 0.152 0426 | 9.912 4624 | 149 | 50 | 447     |
|    | 20 | 9.760 4497 | 299 | 9.848 0022 | 447   | 0.151 9978 | 9.912 4475 | 148 | 40 | 1 44.7  |
|    | 30 | 9.760 4796 | 298 | 9.848 0469 | 447   | 0.151 9531 | 9.912 4327 | 148 | 30 | 2 89.4  |
|    | 40 | 9.760 5094 | 299 | 9.848 0916 | 447   | 0.151 9084 | 9.912 4178 | 148 | 20 | 3 134.1 |
|    | 50 | 9.760 5393 | 299 | 9.848 1363 | 447   | 0.151 8637 | 9.912 4030 | 148 | 10 | 4 178.8 |
| 11 | 0  | 9.760 5692 | 298 | 9.848 1810 | 447   | 0.151 8190 | 9.912 3882 | 149 | 0  | 5 223.5 |
|    | 10 | 9.760 5990 | 299 | 9.848 2257 | 447   | 0.151 7743 | 9.912 3733 | 148 | 50 | 6 268.2 |
|    | 20 | 9.760 6289 | 299 | 9.848 2704 | 447   | 0.151 7296 | 9.912 3585 | 149 | 40 | 7 312.9 |
|    | 30 | 9.760 6588 | 298 | 9.848 3151 | 447   | 0.151 6849 | 9.912 3436 | 148 | 30 | 8 357.6 |
|    | 40 | 9.760 6886 | 298 | 9.848 3598 | 447   | 0.151 6402 | 9.912 3288 | 148 | 20 | 9 402.3 |
|    | 50 | 9.760 7185 | 298 | 9.848 4045 | 447   | 0.151 5955 | 9.912 3139 | 149 | 10 |         |
| 12 | 0  | 9.760 7483 | 299 | 9.848 4492 | 447   | 0.151 5508 | 9.912 2991 | 149 | 0  | 446     |
|    | 10 | 9.760 7782 | 298 | 9.848 4939 | 447   | 0.151 5061 | 9.912 2842 | 148 | 50 | 1 44.6  |
|    | 20 | 9.760 8080 | 298 | 9.848 5386 | 447   | 0.151 4614 | 9.912 2694 | 148 | 40 | 2 89.2  |
|    | 30 | 9.760 8378 | 299 | 9.848 5833 | 447   | 0.151 4167 | 9.912 2545 | 149 | 30 | 3 133.8 |
|    | 40 | 9.760 8677 | 298 | 9.848 6280 | 447   | 0.151 3720 | 9.912 2397 | 148 | 20 | 4 178.4 |
|    | 50 | 9.760 8975 | 299 | 9.848 6727 | 447   | 0.151 3273 | 9.912 2248 | 149 | 10 | 5 223.0 |
| 13 | 0  | 9.760 9274 | 298 | 9.848 7174 | 447   | 0.151 2826 | 9.912 2099 | 148 | 0  | 6 267.6 |
|    | 10 | 9.760 9572 | 298 | 9.848 7621 | 447   | 0.151 2379 | 9.912 1951 | 149 | 50 | 7 312.2 |
|    | 20 | 9.760 9870 | 298 | 9.848 8068 | 447   | 0.151 1932 | 9.912 1802 | 149 | 40 | 8 356.8 |
|    | 30 | 9.761 0168 | 298 | 9.848 8515 | 447   | 0.151 1485 | 9.912 1653 | 148 | 30 | 9 401.4 |
|    | 40 | 9.761 0466 | 298 | 9.848 8962 | 447   | 0.151 1038 | 9.912 1505 | 149 | 20 |         |
|    | 50 | 9.761 0765 | 298 | 9.848 9409 | 446   | 0.151 0591 | 9.912 1356 | 149 | 10 | 298     |
| 14 | 0  | 9.761 1063 | 298 | 9.848 9855 | 447   | 0.151 0145 | 9.912 1207 | 148 | 0  | 1 29.8  |
|    | 10 | 9.761 1361 | 298 | 9.849 0302 | 447   | 0.150 9698 | 9.912 1059 | 149 | 50 | 2 59.6  |
|    | 20 | 9.761 1659 | 298 | 9.849 0749 | 447   | 0.150 9251 | 9.912 0910 | 149 | 40 | 3 89.4  |
|    | 30 | 9.761 1957 | 298 | 9.849 1196 | 447   | 0.150 8804 | 9.912 0761 | 149 | 30 | 4 119.2 |
|    | 40 | 9.761 2255 | 298 | 9.849 1643 | 446   | 0.150 8357 | 9.912 0612 | 149 | 20 | 5 149.6 |
|    | 50 | 9.761 2553 | 298 | 9.849 2089 | 447   | 0.150 7911 | 9.912 0464 | 149 | 10 | 6 178.8 |
| 15 | 0  | 9.761 2851 | 298 | 9.849 2536 | 447   | 0.150 7464 | 9.912 0315 | 149 | 0  | 7 207.9 |
|    | 10 | 9.761 3149 | 298 | 9.849 2983 | 446   | 0.150 7017 | 9.912 0166 | 149 | 50 | 8 237.6 |
|    | 20 | 9.761 3447 | 297 | 9.849 3429 | 447   | 0.150 6571 | 9.912 0017 | 149 | 40 | 9 267.3 |
|    | 30 | 9.761 3744 | 298 | 9.849 3876 | 447   | 0.150 6124 | 9.911 9868 | 149 | 30 |         |
|    | 40 | 9.761 4042 | 298 | 9.849 4323 | 446   | 0.150 5677 | 9.911 9719 | 148 | 20 | 297     |
|    | 50 | 9.761 4340 | 298 | 9.849 4769 | 447   | 0.150 5231 | 9.911 9571 | 149 | 10 | 1 29.7  |
| 16 | 0  | 9.761 4638 | 298 | 9.849 5216 | 447   | 0.150 4784 | 9.911 9422 | 149 | 0  | 2 59.4  |
|    | 10 | 9.761 4936 | 297 | 9.849 5663 | 446   | 0.150 4337 | 9.911 9273 | 149 | 50 | 3 89.1  |
|    | 20 | 9.761 5233 | 298 | 9.849 6109 | 447   | 0.150 3891 | 9.911 9124 | 149 | 40 | 4 118.5 |
|    | 30 | 9.761 5531 | 298 | 9.849 6556 | 447   | 0.150 3444 | 9.911 8975 | 149 | 30 | 5 148.8 |
|    | 40 | 9.761 5829 | 297 | 9.849 7003 | 446   | 0.150 2997 | 9.911 8826 | 149 | 20 | 6 178.2 |
|    | 50 | 9.761 6126 | 298 | 9.849 7449 | 447   | 0.150 2551 | 9.911 8677 | 149 | 10 | 7 207.9 |
| 17 | 0  | 9.761 6424 | 297 | 9.849 7896 | 446   | 0.150 2104 | 9.911 8528 | 149 | 0  | 8 237.6 |
|    | 10 | 9.761 6721 | 298 | 9.849 8342 | 447   | 0.150 1658 | 9.911 8379 | 149 | 50 | 9 267.3 |
|    | 20 | 9.761 7019 | 297 | 9.849 8789 | 446   | 0.150 1211 | 9.911 8230 | 149 | 40 |         |
|    | 30 | 9.761 7316 | 298 | 9.849 9235 | 447   | 0.150 0765 | 9.911 8081 | 149 | 30 | 149     |
|    | 40 | 9.761 7614 | 297 | 9.849 9682 | 446   | 0.150 0318 | 9.911 7932 | 149 | 20 | 1 24.9  |
|    | 50 | 9.761 7911 | 297 | 9.850 0128 | 447   | 0.149 9872 | 9.911 7783 | 149 | 10 | 2 29.8  |
| 18 | 0  | 9.761 8208 | 298 | 9.850 0575 | 446   | 0.149 9425 | 9.911 7634 | 149 | 0  | 3 44.7  |
|    | 10 | 9.761 8506 | 297 | 9.850 1021 | 447   | 0.149 8979 | 9.911 7485 | 149 | 50 | 4 59.6  |
|    | 20 | 9.761 8803 | 297 | 9.850 1468 | 446   | 0.149 8532 | 9.911 7336 | 149 | 40 | 5 74.5  |
|    | 30 | 9.761 9100 | 298 | 9.850 1914 | 446   | 0.149 8086 | 9.911 7187 | 150 | 30 | 6 89.4  |
|    | 40 | 9.761 9398 | 297 | 9.850 2360 | 446   | 0.149 7640 | 9.911 7037 | 149 | 20 | 7 104.3 |
|    | 50 | 9.761 9695 | 297 | 9.850 2807 | 446   | 0.149 7193 | 9.911 6888 | 149 | 10 | 8 119.2 |
| 19 | 0  | 9.761 9992 | 297 | 9.850 3253 | 446   | 0.149 6747 | 9.911 6739 | 149 | 0  | 9 134.1 |
|    | 10 | 9.762 0289 | 297 | 9.850 3699 | 447   | 0.149 6301 | 9.911 6590 | 149 | 50 |         |
|    | 20 | 9.762 0586 | 297 | 9.850 4146 | 446   | 0.149 5854 | 9.911 6441 | 150 | 40 | 150     |
|    | 30 | 9.762 0884 | 298 | 9.850 4592 | 446   | 0.149 5408 | 9.911 6291 | 149 | 30 | 1 15.0  |
|    | 40 | 9.762 1181 | 297 | 9.850 5038 | 446   | 0.149 4962 | 9.911 6142 | 149 | 20 | 2 30.0  |
|    | 50 | 9.762 1478 | 297 | 9.850 5485 | 447   | 0.149 4515 | 9.911 5993 | 149 | 10 | 3 45.0  |
| 20 | 0  | 9.762 1775 | 297 | 9.850 5931 | 446   | 0.149 4069 | 9.911 5844 | 149 | 0  | 4 60.0  |
|    |    |            |     |            |       |            |            |     |    | 5 75.0  |
|    |    |            |     |            |       |            |            |     |    | 6 90.0  |
|    |    |            |     |            |       |            |            |     |    | 7 105.0 |
|    |    |            |     |            |       |            |            |     |    | 8 120.0 |
|    |    |            |     |            |       |            |            |     |    | 9 135.0 |
|    | "  | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d.  | "  |         |







|   | Bra        | d.  | Tang       | d. c. | Cotg       | Cos        | d.  | "  | '       |
|---|------------|-----|------------|-------|------------|------------|-----|----|---------|
| 0 | 9.763 9540 | 296 | 9.853 2680 | 445   | 0.146 7320 | 9.910 6860 | 150 | 0  | 30      |
| 0 | 9.763 9836 | 295 | 9.853 3125 | 446   | 0.146 6875 | 9.910 6710 | 150 | 50 | 445     |
| 0 | 9.764 0131 | 295 | 9.853 3571 | 445   | 0.146 6429 | 9.910 6560 | 150 | 40 | 1 44.5  |
| 0 | 9.764 0426 | 295 | 9.853 4016 | 445   | 0.146 5984 | 9.910 6410 | 151 | 30 | 2 89.0  |
| 0 | 9.764 0721 | 295 | 9.853 4461 | 445   | 0.146 5539 | 9.910 6259 | 151 | 20 | 3 133.5 |
| 0 | 9.764 1016 | 295 | 9.853 4907 | 446   | 0.146 5093 | 9.910 6109 | 150 | 10 | 4 178.0 |
| 0 | 9.764 1311 | 295 | 9.853 5352 | 445   | 0.146 4648 | 9.910 5959 | 150 | 0  | 5 222.5 |
| 0 | 9.764 1606 | 295 | 9.853 5797 | 446   | 0.146 4203 | 9.910 5809 | 151 | 50 | 6 267.0 |
| 0 | 9.764 1901 | 295 | 9.853 6243 | 446   | 0.146 3757 | 9.910 5658 | 150 | 40 | 7 311.5 |
| 0 | 9.764 2196 | 295 | 9.853 6688 | 445   | 0.146 3312 | 9.910 5508 | 150 | 30 | 8 356.0 |
| 0 | 9.764 2491 | 295 | 9.853 7133 | 445   | 0.146 2867 | 9.910 5358 | 151 | 20 | 9 400.5 |
| 0 | 9.764 2786 | 294 | 9.853 7578 | 445   | 0.146 2422 | 9.910 5207 | 150 | 10 |         |
| 0 | 9.764 3080 | 295 | 9.853 8023 | 446   | 0.146 1977 | 9.910 5057 | 150 | 0  | 28 444  |
| 0 | 9.764 3375 | 295 | 9.853 8469 | 445   | 0.146 1531 | 9.910 4907 | 151 | 50 | 1 44.4  |
| 0 | 9.764 3670 | 295 | 9.853 8914 | 445   | 0.146 1086 | 9.910 4756 | 150 | 40 | 2 88.8  |
| 0 | 9.764 3965 | 294 | 9.853 9359 | 445   | 0.146 0641 | 9.910 4606 | 151 | 30 | 3 133.1 |
| 0 | 9.764 4259 | 295 | 9.853 9804 | 445   | 0.146 0196 | 9.910 4455 | 150 | 20 | 4 177.6 |
| 0 | 9.764 4554 | 295 | 9.854 0249 | 445   | 0.145 9751 | 9.910 4305 | 150 | 10 | 5 222.0 |
| 0 | 9.764 4849 | 294 | 9.854 0694 | 445   | 0.145 9306 | 9.910 4155 | 151 | 0  | 6 266.4 |
| 0 | 9.764 5143 | 295 | 9.854 1139 | 445   | 0.145 8861 | 9.910 4004 | 150 | 50 | 7 310.8 |
| 0 | 9.764 5438 | 295 | 9.854 1584 | 445   | 0.145 8416 | 9.910 3854 | 151 | 40 | 8 355.2 |
| 0 | 9.764 5733 | 295 | 9.854 2029 | 446   | 0.145 7971 | 9.910 3703 | 150 | 30 | 9 399.6 |
| 0 | 9.764 6027 | 294 | 9.854 2475 | 445   | 0.145 7525 | 9.910 3553 | 151 | 20 |         |
| 0 | 9.764 6322 | 295 | 9.854 2920 | 445   | 0.145 7080 | 9.910 3402 | 151 | 10 | 296     |
| 0 | 9.764 6616 | 294 | 9.854 3365 | 445   | 0.145 6635 | 9.910 3251 | 150 | 0  | 1 29.5  |
| 0 | 9.764 6910 | 295 | 9.854 3810 | 445   | 0.145 6190 | 9.910 3101 | 151 | 50 | 2 50.0  |
| 0 | 9.764 7205 | 294 | 9.854 4255 | 445   | 0.145 5745 | 9.910 2950 | 150 | 40 | 3 88.5  |
| 0 | 9.764 7499 | 295 | 9.854 4700 | 445   | 0.145 5300 | 9.910 2800 | 151 | 30 | 4 118.0 |
| 0 | 9.764 7793 | 294 | 9.854 5145 | 444   | 0.145 4855 | 9.910 2649 | 151 | 20 | 5 147.5 |
| 0 | 9.764 8088 | 294 | 9.854 5589 | 445   | 0.145 4411 | 9.910 2498 | 150 | 10 | 6 177.0 |
| 0 | 9.764 8382 | 295 | 9.854 6034 | 445   | 0.145 3966 | 9.910 2348 | 151 | 0  | 7 206.5 |
| 0 | 9.764 8677 | 294 | 9.854 6479 | 445   | 0.145 3521 | 9.910 2197 | 150 | 50 | 8 236.0 |
| 0 | 9.764 8971 | 294 | 9.854 6924 | 445   | 0.145 3076 | 9.910 2047 | 151 | 40 | 9 265.5 |
| 0 | 9.764 9265 | 294 | 9.854 7369 | 445   | 0.145 2631 | 9.910 1896 | 151 | 30 |         |
| 0 | 9.764 9559 | 294 | 9.854 7814 | 445   | 0.145 2186 | 9.910 1745 | 151 | 20 | 304     |
| 0 | 9.764 9853 | 294 | 9.854 8259 | 445   | 0.145 1741 | 9.910 1594 | 150 | 10 | 1 29.4  |
| 0 | 9.765 0147 | 294 | 9.854 8704 | 445   | 0.145 1296 | 9.910 1444 | 151 | 0  | 2 58.8  |
| 0 | 9.765 0441 | 294 | 9.854 9149 | 444   | 0.145 0851 | 9.910 1293 | 151 | 50 | 3 87.9  |
| 0 | 9.765 0735 | 295 | 9.854 9593 | 445   | 0.145 0407 | 9.910 1142 | 151 | 40 | 4 117.2 |
| 0 | 9.765 1030 | 294 | 9.855 0038 | 445   | 0.144 9962 | 9.910 0991 | 150 | 30 | 5 146.5 |
| 0 | 9.765 1324 | 293 | 9.855 0483 | 445   | 0.144 9517 | 9.910 0841 | 151 | 20 | 6 175.8 |
| 0 | 9.765 1617 | 294 | 9.855 0928 | 444   | 0.144 9072 | 9.910 0690 | 151 | 10 | 7 205.1 |
| 0 | 9.765 1911 | 294 | 9.855 1372 | 445   | 0.144 8628 | 9.910 0539 | 151 | 0  | 8 234.4 |
| 0 | 9.765 2205 | 294 | 9.855 1817 | 445   | 0.144 8183 | 9.910 0388 | 151 | 50 | 9 263.7 |
| 0 | 9.765 2499 | 294 | 9.855 2262 | 445   | 0.144 7738 | 9.910 0237 | 151 | 40 |         |
| 0 | 9.765 2793 | 294 | 9.855 2707 | 445   | 0.144 7293 | 9.910 0086 | 151 | 30 | 151     |
| 0 | 9.765 3087 | 294 | 9.855 3151 | 444   | 0.144 6849 | 9.909 9935 | 150 | 20 | 1 15.1  |
| 0 | 9.765 3381 | 293 | 9.855 3596 | 445   | 0.144 6404 | 9.909 9785 | 151 | 10 | 2 30.2  |
| 0 | 9.765 3674 | 294 | 9.855 4041 | 444   | 0.144 5959 | 9.909 9634 | 151 | 0  | 3 45.3  |
| 0 | 9.765 3968 | 294 | 9.855 4485 | 445   | 0.144 5515 | 9.909 9483 | 151 | 50 | 4 60.4  |
| 0 | 9.765 4262 | 293 | 9.855 4930 | 445   | 0.144 5070 | 9.909 9332 | 151 | 40 | 5 75.5  |
| 0 | 9.765 4555 | 294 | 9.855 5375 | 444   | 0.144 4625 | 9.909 9181 | 151 | 30 | 6 90.6  |
| 0 | 9.765 4849 | 294 | 9.855 5819 | 445   | 0.144 4181 | 9.909 9030 | 151 | 20 | 7 105.7 |
| 0 | 9.765 5143 | 293 | 9.855 6264 | 444   | 0.144 3736 | 9.909 8879 | 151 | 10 | 8 120.8 |
| 0 | 9.765 5436 | 294 | 9.855 6708 | 445   | 0.144 3292 | 9.909 8728 | 151 | 0  | 9 135.9 |
| 0 | 9.765 5730 | 293 | 9.855 7153 | 444   | 0.144 2847 | 9.909 8577 | 151 | 50 |         |
| 0 | 9.765 6023 | 294 | 9.855 7597 | 445   | 0.144 2403 | 9.909 8426 | 151 | 40 |         |
| 0 | 9.765 6317 | 293 | 9.855 8042 | 445   | 0.144 1958 | 9.909 8275 | 151 | 30 |         |
| 0 | 9.765 6610 | 294 | 9.855 8487 | 444   | 0.144 1513 | 9.909 8124 | 151 | 20 |         |
| 0 | 9.765 6904 | 293 | 9.855 8931 | 445   | 0.144 1069 | 9.909 7973 | 152 | 10 |         |
| 0 | 9.765 7197 | 293 | 9.855 9376 | 445   | 0.144 0624 | 9.909 7821 | 152 | 0  |         |
| " | Cos        | d.  | Cotg       | d. c. | Tang       | Shi        | d.  | "  | '       |



|     | <i>n</i> | Sin        | <i>d</i> | Tang       | <i>d</i> | Cotg       | <i>d</i> | Sec        | <i>d</i> | <i>n</i> |    |
|-----|----------|------------|----------|------------|----------|------------|----------|------------|----------|----------|----|
| 445 | 40       | 0.765 7017 | 129      | 0.765 7017 | 129      | 0.765 7017 | 129      | 0.765 7017 | 129      | 0        | 30 |
| 446 | 40       | 0.765 7477 | 130      | 0.765 7477 | 130      | 0.765 7477 | 130      | 0.765 7477 | 130      | 1        | 29 |
| 447 | 40       | 0.765 7937 | 131      | 0.765 7937 | 131      | 0.765 7937 | 131      | 0.765 7937 | 131      | 2        | 28 |
| 448 | 40       | 0.765 8397 | 132      | 0.765 8397 | 132      | 0.765 8397 | 132      | 0.765 8397 | 132      | 3        | 27 |
| 449 | 40       | 0.765 8857 | 133      | 0.765 8857 | 133      | 0.765 8857 | 133      | 0.765 8857 | 133      | 4        | 26 |
| 450 | 40       | 0.765 9317 | 134      | 0.765 9317 | 134      | 0.765 9317 | 134      | 0.765 9317 | 134      | 5        | 25 |
| 451 | 41       | 0.765 9777 | 135      | 0.765 9777 | 135      | 0.765 9777 | 135      | 0.765 9777 | 135      | 0        | 19 |
| 452 | 41       | 0.766 0237 | 136      | 0.766 0237 | 136      | 0.766 0237 | 136      | 0.766 0237 | 136      | 1        | 18 |
| 453 | 41       | 0.766 0697 | 137      | 0.766 0697 | 137      | 0.766 0697 | 137      | 0.766 0697 | 137      | 2        | 17 |
| 454 | 41       | 0.766 1157 | 138      | 0.766 1157 | 138      | 0.766 1157 | 138      | 0.766 1157 | 138      | 3        | 16 |
| 455 | 41       | 0.766 1617 | 139      | 0.766 1617 | 139      | 0.766 1617 | 139      | 0.766 1617 | 139      | 4        | 15 |
| 456 | 41       | 0.766 2077 | 140      | 0.766 2077 | 140      | 0.766 2077 | 140      | 0.766 2077 | 140      | 5        | 14 |
| 457 | 42       | 0.766 2537 | 141      | 0.766 2537 | 141      | 0.766 2537 | 141      | 0.766 2537 | 141      | 0        | 13 |
| 458 | 42       | 0.766 2997 | 142      | 0.766 2997 | 142      | 0.766 2997 | 142      | 0.766 2997 | 142      | 1        | 12 |
| 459 | 42       | 0.766 3457 | 143      | 0.766 3457 | 143      | 0.766 3457 | 143      | 0.766 3457 | 143      | 2        | 11 |
| 460 | 42       | 0.766 3917 | 144      | 0.766 3917 | 144      | 0.766 3917 | 144      | 0.766 3917 | 144      | 3        | 10 |
| 461 | 43       | 0.766 4377 | 145      | 0.766 4377 | 145      | 0.766 4377 | 145      | 0.766 4377 | 145      | 4        | 9  |
| 462 | 43       | 0.766 4837 | 146      | 0.766 4837 | 146      | 0.766 4837 | 146      | 0.766 4837 | 146      | 5        | 8  |
| 463 | 43       | 0.766 5297 | 147      | 0.766 5297 | 147      | 0.766 5297 | 147      | 0.766 5297 | 147      | 0        | 7  |
| 464 | 43       | 0.766 5757 | 148      | 0.766 5757 | 148      | 0.766 5757 | 148      | 0.766 5757 | 148      | 1        | 6  |
| 465 | 43       | 0.766 6217 | 149      | 0.766 6217 | 149      | 0.766 6217 | 149      | 0.766 6217 | 149      | 2        | 5  |
| 466 | 43       | 0.766 6677 | 150      | 0.766 6677 | 150      | 0.766 6677 | 150      | 0.766 6677 | 150      | 3        | 4  |
| 467 | 44       | 0.766 7137 | 151      | 0.766 7137 | 151      | 0.766 7137 | 151      | 0.766 7137 | 151      | 4        | 3  |
| 468 | 44       | 0.766 7597 | 152      | 0.766 7597 | 152      | 0.766 7597 | 152      | 0.766 7597 | 152      | 5        | 2  |
| 469 | 44       | 0.766 8057 | 153      | 0.766 8057 | 153      | 0.766 8057 | 153      | 0.766 8057 | 153      | 0        | 1  |
| 470 | 44       | 0.766 8517 | 154      | 0.766 8517 | 154      | 0.766 8517 | 154      | 0.766 8517 | 154      | 1        | 0  |
| 471 | 44       | 0.766 8977 | 155      | 0.766 8977 | 155      | 0.766 8977 | 155      | 0.766 8977 | 155      | 2        | 0  |
| 472 | 45       | 0.766 9437 | 156      | 0.766 9437 | 156      | 0.766 9437 | 156      | 0.766 9437 | 156      | 3        | 0  |
| 473 | 45       | 0.766 9897 | 157      | 0.766 9897 | 157      | 0.766 9897 | 157      | 0.766 9897 | 157      | 4        | 0  |
| 474 | 45       | 0.767 0357 | 158      | 0.767 0357 | 158      | 0.767 0357 | 158      | 0.767 0357 | 158      | 5        | 0  |
| 475 | 45       | 0.767 0817 | 159      | 0.767 0817 | 159      | 0.767 0817 | 159      | 0.767 0817 | 159      | 0        | 0  |
| 476 | 45       | 0.767 1277 | 160      | 0.767 1277 | 160      | 0.767 1277 | 160      | 0.767 1277 | 160      | 1        | 0  |
| 477 | 45       | 0.767 1737 | 161      | 0.767 1737 | 161      | 0.767 1737 | 161      | 0.767 1737 | 161      | 2        | 0  |
| 478 | 45       | 0.767 2197 | 162      | 0.767 2197 | 162      | 0.767 2197 | 162      | 0.767 2197 | 162      | 3        | 0  |
| 479 | 45       | 0.767 2657 | 163      | 0.767 2657 | 163      | 0.767 2657 | 163      | 0.767 2657 | 163      | 4        | 0  |
| 480 | 45       | 0.767 3117 | 164      | 0.767 3117 | 164      | 0.767 3117 | 164      | 0.767 3117 | 164      | 5        | 0  |
| 481 | 46       | 0.767 3577 | 165      | 0.767 3577 | 165      | 0.767 3577 | 165      | 0.767 3577 | 165      | 0        | 0  |
| 482 | 46       | 0.767 4037 | 166      | 0.767 4037 | 166      | 0.767 4037 | 166      | 0.767 4037 | 166      | 1        | 0  |
| 483 | 46       | 0.767 4497 | 167      | 0.767 4497 | 167      | 0.767 4497 | 167      | 0.767 4497 | 167      | 2        | 0  |
| 484 | 46       | 0.767 4957 | 168      | 0.767 4957 | 168      | 0.767 4957 | 168      | 0.767 4957 | 168      | 3        | 0  |
| 485 | 46       | 0.767 5417 | 169      | 0.767 5417 | 169      | 0.767 5417 | 169      | 0.767 5417 | 169      | 4        | 0  |
| 486 | 46       | 0.767 5877 | 170      | 0.767 5877 | 170      | 0.767 5877 | 170      | 0.767 5877 | 170      | 5        | 0  |
| 487 | 46       | 0.767 6337 | 171      | 0.767 6337 | 171      | 0.767 6337 | 171      | 0.767 6337 | 171      | 0        | 0  |
| 488 | 46       | 0.767 6797 | 172      | 0.767 6797 | 172      | 0.767 6797 | 172      | 0.767 6797 | 172      | 1        | 0  |
| 489 | 46       | 0.767 7257 | 173      | 0.767 7257 | 173      | 0.767 7257 | 173      | 0.767 7257 | 173      | 2        | 0  |
| 490 | 46       | 0.767 7717 | 174      | 0.767 7717 | 174      | 0.767 7717 | 174      | 0.767 7717 | 174      | 3        | 0  |
| 491 | 46       | 0.767 8177 | 175      | 0.767 8177 | 175      | 0.767 8177 | 175      | 0.767 8177 | 175      | 4        | 0  |
| 492 | 47       | 0.767 8637 | 176      | 0.767 8637 | 176      | 0.767 8637 | 176      | 0.767 8637 | 176      | 5        | 0  |
| 493 | 47       | 0.767 9097 | 177      | 0.767 9097 | 177      | 0.767 9097 | 177      | 0.767 9097 | 177      | 0        | 0  |
| 494 | 47       | 0.767 9557 | 178      | 0.767 9557 | 178      | 0.767 9557 | 178      | 0.767 9557 | 178      | 1        | 0  |
| 495 | 47       | 0.768 0017 | 179      | 0.768 0017 | 179      | 0.768 0017 | 179      | 0.768 0017 | 179      | 2        | 0  |
| 496 | 47       | 0.768 0477 | 180      | 0.768 0477 | 180      | 0.768 0477 | 180      | 0.768 0477 | 180      | 3        | 0  |
| 497 | 47       | 0.768 0937 | 181      | 0.768 0937 | 181      | 0.768 0937 | 181      | 0.768 0937 | 181      | 4        | 0  |
| 498 | 47       | 0.768 1397 | 182      | 0.768 1397 | 182      | 0.768 1397 | 182      | 0.768 1397 | 182      | 5        | 0  |
| 499 | 47       | 0.768 1857 | 183      | 0.768 1857 | 183      | 0.768 1857 | 183      | 0.768 1857 | 183      | 0        | 0  |
| 500 | 47       | 0.768 2317 | 184      | 0.768 2317 | 184      | 0.768 2317 | 184      | 0.768 2317 | 184      | 1        | 0  |
| 501 | 48       | 0.768 2777 | 185      | 0.768 2777 | 185      | 0.768 2777 | 185      | 0.768 2777 | 185      | 2        | 0  |
| 502 | 48       | 0.768 3237 | 186      | 0.768 3237 | 186      | 0.768 3237 | 186      | 0.768 3237 | 186      | 3        | 0  |
| 503 | 48       | 0.768 3697 | 187      | 0.768 3697 | 187      | 0.768 3697 | 187      | 0.768 3697 | 187      | 4        | 0  |
| 504 | 48       | 0.768 4157 | 188      | 0.768 4157 | 188      | 0.768 4157 | 188      | 0.768 4157 | 188      | 5        | 0  |
| 505 | 48       | 0.768 4617 | 189      | 0.768 4617 | 189      | 0.768 4617 | 189      | 0.768 4617 | 189      | 0        | 0  |
| 506 | 48       | 0.768 5077 | 190      | 0.768 5077 | 190      | 0.768 5077 | 190      | 0.768 5077 | 190      | 1        | 0  |
| 507 | 48       | 0.768 5537 | 191      | 0.768 5537 | 191      | 0.768 5537 | 191      | 0.768 5537 | 191      | 2        | 0  |
| 508 | 48       | 0.768 5997 | 192      | 0.768 5997 | 192      | 0.768 5997 | 192      | 0.768 5997 | 192      | 3        | 0  |
| 509 | 48       | 0.768 6457 | 193      | 0.768 6457 | 193      | 0.768 6457 | 193      | 0.768 6457 | 193      | 4        | 0  |
| 510 | 48       | 0.768 6917 | 194      | 0.768 6917 | 194      | 0.768 6917 | 194      | 0.768 6917 | 194      | 5        | 0  |
| 511 | 49       | 0.768 7377 | 195      | 0.768 7377 | 195      | 0.768 7377 | 195      | 0.768 7377 | 195      | 0        | 0  |
| 512 | 49       | 0.768 7837 | 196      | 0.768 7837 | 196      | 0.768 7837 | 196      | 0.768 7837 | 196      | 1        | 0  |
| 513 | 49       | 0.768 8297 | 197      | 0.768 8297 | 197      | 0.768 8297 | 197      | 0.768 8297 | 197      | 2        | 0  |
| 514 | 49       | 0.768 8757 | 198      | 0.768 8757 | 198      | 0.768 8757 | 198      | 0.768 8757 | 198      | 3        | 0  |
| 515 | 49       | 0.768 9217 | 199      | 0.768 9217 | 199      | 0.768 9217 | 199      | 0.768 9217 | 199      | 4        | 0  |
| 516 | 49       | 0.768 9677 | 200      | 0.768 9677 | 200      | 0.768 9677 | 200      | 0.768 9677 | 200      | 5        | 0  |
| 517 | 49       | 0.769 0137 | 201      | 0.769 0137 | 201      | 0.769 0137 | 201      | 0.769 0137 | 201      | 0        | 0  |
| 518 | 49       | 0.769 0597 | 202      | 0.769 0597 | 202      | 0.769 0597 | 202      | 0.769 0597 | 202      | 1        | 0  |
| 519 | 49       | 0.769 1057 | 203      | 0.769 1057 | 203      | 0.769 1057 | 203      | 0.769 1057 | 203      | 2        | 0  |
| 520 | 49       | 0.769 1517 | 204      | 0.769 1517 | 204      | 0.769 1517 | 204      | 0.769 1517 | 204      | 3        | 0  |
| 521 | 49       | 0.769 1977 | 205      | 0.769 1977 | 205      | 0.769 1977 | 205      | 0.769 1977 | 205      | 4        | 0  |
| 522 | 49       | 0.769 2437 | 206      | 0.769 2437 | 206      | 0.769 2437 | 206      | 0.769 2437 | 206      | 5        | 0  |
| 523 | 50       | 0.769 2897 | 207      | 0.769 2897 | 207      | 0.769 2897 | 207      | 0.769 2897 | 207      | 0        | 0  |
| 524 | 50       | 0.769 3357 | 208      | 0.769 3357 | 208      | 0.769 3357 | 208      | 0.769 3357 | 208      | 1        | 0  |
| 525 | 50       | 0.769 3817 | 209      | 0.769 3817 | 209      | 0.769 3817 | 209      | 0.769 3817 | 209      | 2        | 0  |
| 526 | 50       | 0.769 4277 | 210      | 0.769 4277 | 210      | 0.769 4277 | 210      | 0.769 4277 | 210      | 3        | 0  |
| 527 | 50       | 0.769 4737 | 211      | 0.769 4737 | 211      | 0.769 4737 | 211      | 0.769 4737 | 211      | 4        | 0  |
| 528 | 50       | 0.769 5197 | 212      | 0.769 5197 | 212      | 0.769 5197 | 212      | 0.769 5197 | 212      | 5        | 0  |
| 529 | 50       | 0.769 5657 | 213      | 0.769 5657 | 213      | 0.769 5657 | 213      | 0.769 5657 | 213      | 0        | 0  |
| 530 | 50       | 0.769 6117 | 214      | 0.769 6117 | 214      | 0.769 6117 | 214      | 0.769 6117 | 214      | 1        | 0  |
| 531 | 50       | 0.769 6577 | 215      | 0.769 6577 | 215      | 0.769 6577 | 215      | 0.769 6577 | 215      | 2        | 0  |
| 532 | 50       | 0.769 7037 | 216      | 0.769 7037 | 216      | 0.769 7037 | 216      | 0.769 7037 | 216      | 3        | 0  |
| 533 | 50       | 0.769 7497 | 217      | 0.769 7497 | 217      | 0.769 7497 | 217      | 0.769 7497 | 217      | 4        | 0  |
| 534 | 50       | 0.769 7957 | 218      | 0.769 7957 | 218      | 0.769 7957 | 218      | 0.769 7957 | 218      | 5        | 0  |
| 535 | 50       | 0.769 8417 | 219      | 0.769 8417 | 219      | 0.769 8417 | 219      | 0.769 8417 | 219      | 0        | 0  |
| 536 | 50       | 0.769 8877 | 220      | 0.769 8877 | 220      | 0.769 8877 | 220      | 0.769 8877 | 220      | 1        | 0  |
| 537 | 50       | 0.769 9337 | 221      | 0.769 9337 | 221      | 0.769 9337 | 221      | 0.769 9337 | 221      | 2        | 0  |
| 538 | 50       | 0.770 0000 | 222      | 0.770 0000 | 222      | 0.770 0000 | 222      | 0.770 0000 | 222      | 3        | 0  |
| 539 | 50       | 0.770 0000 | 223      | 0.770 0000 | 223      | 0.770 0000 | 223      | 0.770 0000 | 223      | 4        | 0  |
| 540 | 50       | 0.770 0000 | 224      | 0.770 0000 | 224      | 0.770 0000 | 224      | 0.770 0000 | 224      | 5        | 0  |
| 541 | 50       | 0.770 0000 | 225      | 0.770 0000 | 225      | 0.770 0000 | 225      | 0.770 0000 | 225      | 0        | 0  |
| 542 | 50       | 0.770 0000 | 226      | 0.770 0000 |          |            |          |            |          |          |    |



| n  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d.  | n  |    |
|----|------------|-----|------------|-------|------------|------------|-----|----|----|
| 0  | 9.767 4746 | 291 | 9.858 6019 | 443   | 0.141 3981 | 9.908 8727 | 152 | 0  | 10 |
| 0  | 9.767 5037 | 292 | 9.858 6162 | 444   | 0.141 3538 | 9.908 8575 | 152 | 50 |    |
| 10 | 9.767 5329 | 291 | 9.858 6906 | 443   | 0.141 3094 | 9.908 8423 | 152 | 40 |    |
| 10 | 9.767 5620 | 292 | 9.858 7349 | 444   | 0.141 2651 | 9.908 8271 | 152 | 30 |    |
| 10 | 9.767 5912 | 291 | 9.858 7793 | 443   | 0.141 2207 | 9.908 8119 | 152 | 20 |    |
| 10 | 9.767 6203 | 291 | 9.858 8237 | 444   | 0.141 1763 | 9.908 7967 | 152 | 10 |    |
| 0  | 9.767 6494 | 292 | 9.858 8680 | 443   | 0.141 1320 | 9.908 7814 | 152 | 0  | 9  |
| 10 | 9.767 6786 | 291 | 9.858 9124 | 443   | 0.141 0876 | 9.908 7662 | 152 | 50 |    |
| 10 | 9.767 7077 | 292 | 9.858 9567 | 444   | 0.141 0433 | 9.908 7510 | 152 | 40 |    |
| 10 | 9.767 7369 | 291 | 9.859 0011 | 443   | 0.140 9989 | 9.908 7358 | 152 | 30 |    |
| 10 | 9.767 7660 | 291 | 9.859 0454 | 443   | 0.140 9546 | 9.908 7206 | 152 | 20 |    |
| 10 | 9.767 7951 | 291 | 9.859 0898 | 444   | 0.140 9102 | 9.908 7054 | 152 | 10 |    |
| 0  | 9.767 8242 | 292 | 9.859 1341 | 443   | 0.140 8659 | 9.908 6901 | 152 | 0  | 8  |
| 10 | 9.767 8534 | 291 | 9.859 1784 | 443   | 0.140 8216 | 9.908 6749 | 152 | 50 |    |
| 10 | 9.767 8825 | 291 | 9.859 2228 | 444   | 0.140 7772 | 9.908 6597 | 152 | 40 |    |
| 10 | 9.767 9116 | 291 | 9.859 2671 | 443   | 0.140 7329 | 9.908 6445 | 152 | 30 |    |
| 10 | 9.767 9407 | 291 | 9.859 3115 | 443   | 0.140 6885 | 9.908 6292 | 152 | 20 |    |
| 10 | 9.767 9698 | 291 | 9.859 3558 | 444   | 0.140 6442 | 9.908 6140 | 152 | 10 |    |
| 0  | 9.767 9989 | 291 | 9.859 4002 | 443   | 0.140 5998 | 9.908 5988 | 152 | 0  | 7  |
| 10 | 9.768 0280 | 291 | 9.859 4445 | 443   | 0.140 5555 | 9.908 5835 | 152 | 50 |    |
| 10 | 9.768 0571 | 291 | 9.859 4888 | 443   | 0.140 5112 | 9.908 5683 | 152 | 40 |    |
| 10 | 9.768 0862 | 291 | 9.859 5332 | 443   | 0.140 4668 | 9.908 5531 | 152 | 30 |    |
| 10 | 9.768 1153 | 291 | 9.859 5775 | 443   | 0.140 4225 | 9.908 5378 | 152 | 20 |    |
| 10 | 9.768 1444 | 291 | 9.859 6218 | 443   | 0.140 3782 | 9.908 5226 | 152 | 10 |    |
| 0  | 9.768 1735 | 291 | 9.859 6661 | 443   | 0.140 3339 | 9.908 5073 | 152 | 0  | 6  |
| 10 | 9.768 2026 | 291 | 9.859 7105 | 443   | 0.140 2895 | 9.908 4921 | 152 | 50 |    |
| 10 | 9.768 2317 | 291 | 9.859 7548 | 443   | 0.140 2452 | 9.908 4769 | 152 | 40 |    |
| 10 | 9.768 2607 | 291 | 9.859 7991 | 443   | 0.140 2009 | 9.908 4616 | 152 | 30 |    |
| 10 | 9.768 2898 | 291 | 9.859 8434 | 443   | 0.140 1566 | 9.908 4464 | 152 | 20 |    |
| 10 | 9.768 3189 | 291 | 9.859 8878 | 443   | 0.140 1122 | 9.908 4311 | 152 | 10 |    |
| 0  | 9.768 3480 | 290 | 9.859 9321 | 443   | 0.140 0679 | 9.908 4159 | 152 | 0  | 5  |
| 10 | 9.768 3771 | 291 | 9.859 9764 | 443   | 0.140 0236 | 9.908 4006 | 152 | 50 |    |
| 10 | 9.768 4062 | 290 | 9.860 0207 | 443   | 0.139 9793 | 9.908 3854 | 152 | 40 |    |
| 10 | 9.768 4353 | 291 | 9.860 0650 | 443   | 0.139 9350 | 9.908 3701 | 152 | 30 |    |
| 10 | 9.768 4644 | 291 | 9.860 1094 | 443   | 0.139 8906 | 9.908 3549 | 152 | 20 |    |
| 10 | 9.768 4935 | 290 | 9.860 1537 | 443   | 0.139 8463 | 9.908 3396 | 152 | 10 |    |
| 0  | 9.768 5226 | 291 | 9.860 1980 | 443   | 0.139 8020 | 9.908 3243 | 152 | 0  | 4  |
| 10 | 9.768 5517 | 290 | 9.860 2423 | 443   | 0.139 7577 | 9.908 3091 | 152 | 50 |    |
| 10 | 9.768 5808 | 291 | 9.860 2866 | 443   | 0.139 7134 | 9.908 2938 | 152 | 40 |    |
| 10 | 9.768 6099 | 291 | 9.860 3309 | 443   | 0.139 6691 | 9.908 2785 | 152 | 30 |    |
| 10 | 9.768 6390 | 290 | 9.860 3752 | 443   | 0.139 6248 | 9.908 2633 | 152 | 20 |    |
| 10 | 9.768 6681 | 291 | 9.860 4195 | 443   | 0.139 5805 | 9.908 2480 | 152 | 10 |    |
| 0  | 9.768 6972 | 290 | 9.860 4638 | 443   | 0.139 5362 | 9.908 2327 | 152 | 0  | 3  |
| 10 | 9.768 7263 | 290 | 9.860 5081 | 443   | 0.139 4919 | 9.908 2175 | 152 | 50 |    |
| 10 | 9.768 7554 | 291 | 9.860 5524 | 443   | 0.139 4476 | 9.908 2022 | 152 | 40 |    |
| 10 | 9.768 7845 | 290 | 9.860 5967 | 443   | 0.139 4033 | 9.908 1869 | 152 | 30 |    |
| 10 | 9.768 8136 | 290 | 9.860 6410 | 443   | 0.139 3590 | 9.908 1717 | 152 | 20 |    |
| 10 | 9.768 8427 | 290 | 9.860 6853 | 443   | 0.139 3147 | 9.908 1564 | 152 | 10 |    |
| 0  | 9.768 8718 | 290 | 9.860 7296 | 443   | 0.139 2704 | 9.908 1411 | 152 | 0  | 2  |
| 10 | 9.768 9009 | 290 | 9.860 7739 | 443   | 0.139 2261 | 9.908 1258 | 152 | 50 |    |
| 10 | 9.768 9300 | 290 | 9.860 8182 | 443   | 0.139 1818 | 9.908 1105 | 152 | 40 |    |
| 10 | 9.768 9591 | 291 | 9.860 8625 | 443   | 0.139 1375 | 9.908 0953 | 152 | 30 |    |
| 10 | 9.768 9882 | 290 | 9.860 9068 | 443   | 0.139 0932 | 9.908 0800 | 152 | 20 |    |
| 10 | 9.769 0173 | 290 | 9.860 9511 | 443   | 0.139 0489 | 9.908 0647 | 152 | 10 |    |
| 0  | 9.769 0464 | 289 | 9.860 9954 | 442   | 0.139 0046 | 9.908 0494 | 152 | 0  | 1  |
| 10 | 9.769 0755 | 290 | 9.861 0397 | 443   | 0.138 9603 | 9.908 0341 | 152 | 50 |    |
| 10 | 9.769 1046 | 290 | 9.861 0840 | 443   | 0.138 9160 | 9.908 0188 | 152 | 40 |    |
| 10 | 9.769 1337 | 290 | 9.861 1283 | 443   | 0.138 8718 | 9.908 0035 | 152 | 30 |    |
| 10 | 9.769 1628 | 290 | 9.861 1725 | 443   | 0.138 8275 | 9.907 9882 | 152 | 20 |    |
| 10 | 9.769 1919 | 290 | 9.861 2168 | 442   | 0.138 7832 | 9.907 9729 | 152 | 10 |    |
| 0  | 9.769 2187 | 290 | 9.861 2610 | 442   | 0.138 7390 | 9.907 9576 | 152 | 0  | 0  |
| n  | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d.  | n  |    |

443  
1 44.3  
2 88.6  
3 132.9  
4 177.2  
5 221.5  
6 265.8  
7 310.1  
8 354.4  
9 398.7

442  
1 44.2  
2 88.4  
3 132.6  
4 176.8  
5 221.0  
6 265.2  
7 309.4  
8 353.6  
9 397.8

291  
1 29.1  
2 58.2  
3 87.3  
4 116.4  
5 145.5  
6 174.6  
7 203.7  
8 232.8  
9 261.9

290  
1 29.0  
2 58.0  
3 87.0  
4 116.0  
5 145.0  
6 174.0  
7 203.0  
8 232.0  
9 261.0

152  
1 15.2  
2 30.4  
3 45.6  
4 60.8  
5 76.0  
6 91.2  
7 106.4  
8 121.6  
9 136.8

153  
1 15.3  
2 30.6  
3 45.9  
4 61.2  
5 76.5  
6 91.8  
7 107.1  
8 122.4  
9 137.7



|         |    | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d.  |    |    |
|---------|----|------------|-----|------------|-------|------------|------------|-----|----|----|
| 443     | 0  | 9.769 2187 | 290 | 9.861 2610 | 443   | 0.138 7390 | 9.907 9576 | 153 | 0  | 60 |
| 1 44.3  | 10 | 9.769 2477 | 289 | 9.861 3053 | 443   | 0.138 6947 | 9.907 9423 | 153 | 50 |    |
| 2 88.6  | 20 | 9.769 2766 | 289 | 9.861 3496 | 443   | 0.138 6504 | 9.907 9270 | 153 | 40 |    |
| 3 132.9 | 30 | 9.769 3056 | 290 | 9.861 3939 | 442   | 0.138 6061 | 9.907 9117 | 153 | 30 |    |
| 4 177.2 | 40 | 9.769 3346 | 289 | 9.861 4381 | 443   | 0.138 5619 | 9.907 8964 | 153 | 20 |    |
| 5 221.5 | 50 | 9.769 3635 | 290 | 9.861 4824 | 443   | 0.138 5176 | 9.907 8811 | 153 | 10 |    |
| 6 265.8 | 1  | 9.769 3925 | 290 | 9.861 5267 | 442   | 0.138 4733 | 9.907 8658 | 153 | 0  | 59 |
| 7 310.1 | 10 | 9.769 4215 | 289 | 9.861 5709 | 443   | 0.138 4291 | 9.907 8505 | 153 | 50 |    |
| 8 354.4 | 20 | 9.769 4504 | 290 | 9.861 6152 | 443   | 0.138 3848 | 9.907 8352 | 153 | 40 |    |
| 9 398.7 | 30 | 9.769 4794 | 289 | 9.861 6595 | 442   | 0.138 3405 | 9.907 8199 | 153 | 30 |    |
|         | 40 | 9.769 5083 | 290 | 9.861 7037 | 443   | 0.138 2963 | 9.907 8046 | 153 | 20 |    |
|         | 50 | 9.769 5373 | 289 | 9.861 7480 | 443   | 0.138 2520 | 9.907 7893 | 153 | 10 |    |
| 442     | 2  | 9.769 5662 | 290 | 9.861 7923 | 442   | 0.138 2077 | 9.907 7740 | 154 | 0  | 58 |
| 1 44.2  | 10 | 9.769 5952 | 289 | 9.861 8365 | 443   | 0.138 1635 | 9.907 7586 | 153 | 50 |    |
| 2 88.4  | 20 | 9.769 6241 | 290 | 9.861 8808 | 442   | 0.138 1192 | 9.907 7433 | 153 | 40 |    |
| 3 132.6 | 30 | 9.769 6531 | 289 | 9.861 9250 | 443   | 0.138 0750 | 9.907 7280 | 153 | 30 |    |
| 4 176.8 | 40 | 9.769 6820 | 290 | 9.861 9693 | 443   | 0.138 0307 | 9.907 7127 | 153 | 20 |    |
| 5 221.0 | 50 | 9.769 7109 | 289 | 9.862 0136 | 442   | 0.137 9864 | 9.907 6974 | 154 | 10 |    |
| 6 265.2 | 3  | 9.769 7398 | 290 | 9.862 0578 | 443   | 0.137 9422 | 9.907 6820 | 153 | 0  | 57 |
| 7 309.4 | 10 | 9.769 7688 | 289 | 9.862 1021 | 442   | 0.137 8979 | 9.907 6667 | 153 | 50 |    |
| 8 353.6 | 20 | 9.769 7977 | 290 | 9.862 1463 | 443   | 0.137 8537 | 9.907 6514 | 153 | 40 |    |
| 9 397.8 | 30 | 9.769 8266 | 289 | 9.862 1906 | 442   | 0.137 8094 | 9.907 6361 | 154 | 30 |    |
|         | 40 | 9.769 8555 | 290 | 9.862 2348 | 443   | 0.137 7652 | 9.907 6207 | 153 | 20 |    |
| 290     | 50 | 9.769 8844 | 289 | 9.862 2791 | 442   | 0.137 7209 | 9.907 6054 | 153 | 10 |    |
| 1 29.0  | 4  | 9.769 9134 | 290 | 9.862 3233 | 442   | 0.137 6767 | 9.907 5901 | 154 | 0  | 56 |
| 2 73.0  | 10 | 9.769 9423 | 289 | 9.862 3675 | 443   | 0.137 6325 | 9.907 5747 | 153 | 50 |    |
| 3 116.0 | 20 | 9.769 9712 | 290 | 9.862 4118 | 442   | 0.137 5882 | 9.907 5594 | 154 | 40 |    |
| 4 155.0 | 30 | 9.770 0001 | 289 | 9.862 4560 | 443   | 0.137 5440 | 9.907 5440 | 153 | 30 |    |
| 5 194.0 | 40 | 9.770 0290 | 290 | 9.862 5003 | 442   | 0.137 4997 | 9.907 5287 | 153 | 20 |    |
| 6 232.0 | 50 | 9.770 0579 | 289 | 9.862 5445 | 442   | 0.137 4555 | 9.907 5134 | 154 | 10 |    |
| 7 261.0 | 5  | 9.770 0868 | 288 | 9.862 5887 | 443   | 0.137 4113 | 9.907 4980 | 153 | 0  | 55 |
|         | 10 | 9.770 1156 | 289 | 9.862 6330 | 442   | 0.137 3670 | 9.907 4827 | 154 | 50 |    |
| 280     | 20 | 9.770 1445 | 290 | 9.862 6772 | 442   | 0.137 3228 | 9.907 4673 | 153 | 40 |    |
| 1 18.0  | 30 | 9.770 1734 | 289 | 9.862 7214 | 443   | 0.137 2786 | 9.907 4520 | 154 | 30 |    |
| 2 57.8  | 40 | 9.770 2023 | 290 | 9.862 7657 | 442   | 0.137 2343 | 9.907 4366 | 153 | 20 |    |
| 3 96.7  | 50 | 9.770 2312 | 289 | 9.862 8099 | 442   | 0.137 1901 | 9.907 4213 | 154 | 10 |    |
| 4 135.6 | 6  | 9.770 2601 | 288 | 9.862 8541 | 443   | 0.137 1459 | 9.907 4059 | 153 | 0  | 54 |
| 5 174.5 | 10 | 9.770 2889 | 289 | 9.862 8984 | 442   | 0.137 1016 | 9.907 3906 | 154 | 50 |    |
| 6 213.4 | 20 | 9.770 3178 | 290 | 9.862 9426 | 442   | 0.137 0574 | 9.907 3752 | 153 | 40 |    |
| 7 252.3 | 30 | 9.770 3467 | 288 | 9.862 9868 | 442   | 0.137 0132 | 9.907 3599 | 154 | 30 |    |
| 8 291.2 | 40 | 9.770 3755 | 289 | 9.863 0310 | 443   | 0.136 9690 | 9.907 3445 | 154 | 20 |    |
| 9 330.1 | 50 | 9.770 4044 | 288 | 9.863 0753 | 442   | 0.136 9247 | 9.907 3291 | 153 | 10 |    |
| 288     | 7  | 9.770 4332 | 289 | 9.863 1195 | 442   | 0.136 8805 | 9.907 3138 | 154 | 0  | 53 |
| 1 18.8  | 10 | 9.770 4621 | 289 | 9.863 1637 | 442   | 0.136 8363 | 9.907 2984 | 154 | 50 |    |
| 2 57.6  | 20 | 9.770 4910 | 288 | 9.863 2079 | 442   | 0.136 7921 | 9.907 2830 | 153 | 40 |    |
| 3 96.4  | 30 | 9.770 5198 | 288 | 9.863 2521 | 442   | 0.136 7479 | 9.907 2677 | 154 | 30 |    |
| 4 135.2 | 40 | 9.770 5486 | 289 | 9.863 2963 | 442   | 0.136 7037 | 9.907 2523 | 154 | 20 |    |
| 5 174.0 | 50 | 9.770 5775 | 288 | 9.863 3405 | 443   | 0.136 6595 | 9.907 2369 | 153 | 10 |    |
| 6 212.8 | 8  | 9.770 6063 | 289 | 9.863 3848 | 442   | 0.136 6152 | 9.907 2216 | 154 | 0  | 52 |
| 7 251.6 | 10 | 9.770 6352 | 288 | 9.863 4290 | 442   | 0.136 5710 | 9.907 2062 | 154 | 50 |    |
| 8 290.4 | 20 | 9.770 6640 | 288 | 9.863 4732 | 442   | 0.136 5268 | 9.907 1908 | 154 | 40 |    |
| 9 329.2 | 30 | 9.770 6928 | 289 | 9.863 5174 | 442   | 0.136 4826 | 9.907 1754 | 153 | 30 |    |
| 153     | 40 | 9.770 7217 | 288 | 9.863 5616 | 442   | 0.136 4384 | 9.907 1601 | 154 | 20 |    |
| 1 15.3  | 50 | 9.770 7505 | 288 | 9.863 6058 | 442   | 0.136 3942 | 9.907 1447 | 154 | 10 |    |
| 2 30.6  | 9  | 9.770 7793 | 288 | 9.863 6500 | 442   | 0.136 3500 | 9.907 1293 | 154 | 0  | 51 |
| 3 45.9  | 10 | 9.770 8081 | 288 | 9.863 6942 | 442   | 0.136 3058 | 9.907 1139 | 154 | 50 |    |
| 4 61.2  | 20 | 9.770 8369 | 289 | 9.863 7384 | 442   | 0.136 2616 | 9.907 0985 | 153 | 40 |    |
| 5 76.5  | 30 | 9.770 8658 | 288 | 9.863 7826 | 442   | 0.136 2174 | 9.907 0832 | 154 | 30 |    |
| 6 91.8  | 40 | 9.770 8946 | 288 | 9.863 8268 | 442   | 0.136 1732 | 9.907 0678 | 154 | 20 |    |
| 7 107.1 | 50 | 9.770 9234 | 288 | 9.863 8710 | 442   | 0.136 1290 | 9.907 0524 | 154 | 10 |    |
| 8 122.4 | 10 | 9.770 9522 | 288 | 9.863 9152 | 442   | 0.136 0848 | 9.907 0370 | 154 | 0  | 50 |
| 9 137.7 |    |            |     |            |       |            |            |     |    |    |
|         |    | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d.  |    |    |



| "  | Sin        | d.         | Tang       | d. c.      | Cotg       | Coa        | d.         | "   | "  |
|----|------------|------------|------------|------------|------------|------------|------------|-----|----|
| 1  | 0          | 9.770 9522 | 288        | 9.863 9152 | 442        | 0.136 0848 | 9.907 0370 | 154 | 0  |
| 10 | 0.770 9810 | 288        | 9.863 9594 | 442        | 0.136 0406 | 9.907 0216 | 154        | 50  | 50 |
| 20 | 0.771 0098 | 288        | 9.864 0036 | 442        | 0.135 9964 | 9.907 0062 | 154        | 40  | 40 |
| 30 | 0.771 0386 | 288        | 9.864 0478 | 442        | 0.135 9522 | 9.906 9908 | 154        | 30  | 30 |
| 40 | 0.771 0674 | 288        | 9.864 0920 | 442        | 0.135 9080 | 9.906 9754 | 154        | 20  | 20 |
| 50 | 0.771 0962 | 287        | 9.864 1362 | 441        | 0.135 8638 | 9.906 9600 | 154        | 10  | 10 |
| 1  | 0          | 9.771 1249 | 288        | 9.864 1803 | 442        | 0.135 8197 | 9.906 9446 | 154 | 0  |
| 10 | 0.771 1537 | 288        | 9.864 2245 | 442        | 0.135 7755 | 9.906 9292 | 154        | 50  | 49 |
| 20 | 0.771 1825 | 288        | 9.864 2687 | 442        | 0.135 7313 | 9.906 9138 | 154        | 40  | 40 |
| 30 | 0.771 2113 | 288        | 9.864 3129 | 442        | 0.135 6871 | 9.906 8984 | 154        | 30  | 30 |
| 40 | 0.771 2401 | 287        | 9.864 3571 | 442        | 0.135 6429 | 9.906 8830 | 154        | 20  | 20 |
| 50 | 0.771 2688 | 286        | 9.864 4013 | 441        | 0.135 5987 | 9.906 8676 | 154        | 10  | 10 |
| 2  | 0          | 9.771 2976 | 288        | 9.864 4454 | 442        | 0.135 5546 | 9.906 8522 | 154 | 0  |
| 10 | 0.771 3264 | 287        | 9.864 4896 | 442        | 0.135 5104 | 9.906 8368 | 154        | 50  | 48 |
| 20 | 0.771 3551 | 288        | 9.864 5338 | 442        | 0.135 4662 | 9.906 8214 | 154        | 40  | 40 |
| 30 | 0.771 3839 | 288        | 9.864 5780 | 442        | 0.135 4220 | 9.906 8059 | 154        | 30  | 30 |
| 40 | 0.771 4127 | 287        | 9.864 6221 | 442        | 0.135 3779 | 9.906 7905 | 154        | 20  | 20 |
| 50 | 0.771 4414 | 288        | 9.864 6663 | 442        | 0.135 3337 | 9.906 7751 | 154        | 10  | 10 |
| 3  | 0          | 9.771 4702 | 287        | 9.864 7105 | 441        | 0.135 2895 | 9.906 7597 | 154 | 0  |
| 10 | 0.771 4989 | 288        | 9.864 7546 | 442        | 0.135 2454 | 9.906 7443 | 154        | 50  | 47 |
| 20 | 0.771 5277 | 287        | 9.864 7988 | 442        | 0.135 2012 | 9.906 7288 | 154        | 40  | 40 |
| 30 | 0.771 5564 | 287        | 9.864 8430 | 441        | 0.135 1570 | 9.906 7134 | 154        | 30  | 30 |
| 40 | 0.771 5851 | 288        | 9.864 8871 | 442        | 0.135 1129 | 9.906 6980 | 154        | 20  | 20 |
| 50 | 0.771 6139 | 287        | 9.864 9313 | 442        | 0.135 0687 | 9.906 6826 | 154        | 10  | 10 |
| 4  | 0          | 9.771 6426 | 288        | 9.864 9755 | 441        | 0.135 0245 | 9.906 6671 | 154 | 0  |
| 10 | 0.771 6714 | 287        | 9.865 0196 | 442        | 0.134 9804 | 9.906 6517 | 154        | 50  | 46 |
| 20 | 0.771 7001 | 287        | 9.865 0638 | 442        | 0.134 9362 | 9.906 6363 | 154        | 40  | 40 |
| 30 | 0.771 7288 | 287        | 9.865 1080 | 441        | 0.134 8920 | 9.906 6208 | 154        | 30  | 30 |
| 40 | 0.771 7575 | 287        | 9.865 1521 | 442        | 0.134 8479 | 9.906 6054 | 154        | 20  | 20 |
| 50 | 0.771 7862 | 286        | 9.865 1963 | 441        | 0.134 8037 | 9.906 5900 | 154        | 10  | 10 |
| 5  | 0          | 9.771 8150 | 287        | 9.865 2404 | 442        | 0.134 7596 | 9.906 5745 | 154 | 0  |
| 10 | 0.771 8437 | 287        | 9.865 2846 | 441        | 0.134 7154 | 9.906 5591 | 154        | 50  | 45 |
| 20 | 0.771 8724 | 287        | 9.865 3287 | 442        | 0.134 6713 | 9.906 5437 | 154        | 40  | 40 |
| 30 | 0.771 9011 | 287        | 9.865 3729 | 442        | 0.134 6271 | 9.906 5282 | 154        | 30  | 30 |
| 40 | 0.771 9298 | 287        | 9.865 4170 | 441        | 0.134 5830 | 9.906 5128 | 154        | 20  | 20 |
| 50 | 0.771 9585 | 287        | 9.865 4612 | 441        | 0.134 5388 | 9.906 4973 | 154        | 10  | 10 |
| 6  | 0          | 9.771 9872 | 287        | 9.865 5053 | 442        | 0.134 4947 | 9.906 4819 | 154 | 0  |
| 10 | 0.772 0159 | 287        | 9.865 5495 | 441        | 0.134 4505 | 9.906 4664 | 154        | 50  | 44 |
| 20 | 0.772 0446 | 287        | 9.865 5936 | 442        | 0.134 4064 | 9.906 4510 | 154        | 40  | 40 |
| 30 | 0.772 0733 | 287        | 9.865 6378 | 442        | 0.134 3622 | 9.906 4355 | 154        | 30  | 30 |
| 40 | 0.772 1020 | 287        | 9.865 6819 | 441        | 0.134 3181 | 9.906 4201 | 154        | 20  | 20 |
| 50 | 0.772 1307 | 286        | 9.865 7260 | 442        | 0.134 2740 | 9.906 4046 | 154        | 10  | 10 |
| 7  | 0          | 9.772 1594 | 287        | 9.865 7702 | 441        | 0.134 2298 | 9.906 3892 | 154 | 0  |
| 10 | 0.772 1881 | 287        | 9.865 8143 | 441        | 0.134 1857 | 9.906 3737 | 154        | 50  | 43 |
| 20 | 0.772 2167 | 287        | 9.865 8584 | 442        | 0.134 1416 | 9.906 3583 | 154        | 40  | 40 |
| 30 | 0.772 2454 | 286        | 9.865 9026 | 441        | 0.134 0974 | 9.906 3428 | 154        | 30  | 30 |
| 40 | 0.772 2741 | 287        | 9.865 9467 | 441        | 0.134 0533 | 9.906 3273 | 154        | 20  | 20 |
| 50 | 0.772 3027 | 287        | 9.865 9908 | 442        | 0.134 0092 | 9.906 3119 | 154        | 10  | 10 |
| 8  | 0          | 9.772 3314 | 286        | 9.866 0350 | 441        | 0.133 9650 | 9.906 2964 | 154 | 0  |
| 10 | 0.772 3600 | 287        | 9.866 0791 | 441        | 0.133 9209 | 9.906 2809 | 154        | 50  | 42 |
| 20 | 0.772 3887 | 287        | 9.866 1232 | 442        | 0.133 8768 | 9.906 2655 | 154        | 40  | 40 |
| 30 | 0.772 4174 | 286        | 9.866 1674 | 441        | 0.133 8326 | 9.906 2500 | 154        | 30  | 30 |
| 40 | 0.772 4460 | 287        | 9.866 2115 | 441        | 0.133 7885 | 9.906 2345 | 154        | 20  | 20 |
| 50 | 0.772 4747 | 286        | 9.866 2556 | 441        | 0.133 7444 | 9.906 2190 | 154        | 10  | 10 |
| 9  | 0          | 9.772 5033 | 286        | 9.866 2997 | 442        | 0.133 7003 | 9.906 2036 | 154 | 0  |
| 10 | 0.772 5319 | 287        | 9.866 3439 | 441        | 0.133 6561 | 9.906 1881 | 154        | 50  | 41 |
| 20 | 0.772 5606 | 286        | 9.866 3880 | 441        | 0.133 6120 | 9.906 1726 | 154        | 40  | 40 |
| 30 | 0.772 5892 | 287        | 9.866 4321 | 441        | 0.133 5679 | 9.906 1571 | 154        | 30  | 30 |
| 40 | 0.772 6179 | 286        | 9.866 4762 | 441        | 0.133 5238 | 9.906 1417 | 154        | 20  | 20 |
| 50 | 0.772 6465 | 286        | 9.866 5203 | 441        | 0.133 4797 | 9.906 1262 | 154        | 10  | 10 |
| 10 | 0          | 9.772 6751 | 286        | 9.866 5644 | 441        | 0.133 4356 | 9.906 1107 | 154 | 0  |
| "  | Coa        | d.         | Cotg       | d. c.      | Tang       | Sin        | d.         | "   | "  |

53°

442  
1 44.4  
2 88.4  
3 132.6  
4 176.8  
5 221.0  
6 265.2  
7 309.4  
8 353.6  
9 397.8

441  
1 44.4  
2 88.2  
3 132.3  
4 176.4  
5 220.5  
6 264.6  
7 308.7  
8 352.8  
9 396.9

287  
1 28.7  
2 57.4  
3 86.1  
4 114.8  
5 143.5  
6 172.2  
7 200.9  
8 229.6  
9 258.3

286  
1 28.6  
2 57.2  
3 85.8  
4 114.4  
5 143.0  
6 171.6  
7 200.2  
8 228.8  
9 257.4

164  
1 15.4  
2 30.8  
3 46.2  
4 61.6  
5 77.0  
6 92.4  
7 107.8  
8 123.2  
9 138.6

165  
1 15.5  
2 31.0  
3 46.5  
4 62.0  
5 77.5  
6 93.0  
7 108.5  
8 124.0  
9 139.5



[illegible]



|    | "  | Sta        | d.  | Tang       | d. c. | Cotg       | Cos        | d.  | "  |    |
|----|----|------------|-----|------------|-------|------------|------------|-----|----|----|
| 30 | 0  | 9.774 3876 | 285 | 9.869 2089 | 440   | 0.130 7911 | 9.905 1787 | 156 | 0  | 80 |
|    | 10 | 9.774 4161 | 284 | 9.869 2529 | 440   | 0.130 7471 | 9.905 1631 | 155 | 50 |    |
|    | 20 | 9.774 4445 | 284 | 9.869 2969 | 441   | 0.130 7031 | 9.905 1476 | 156 | 40 |    |
|    | 30 | 9.774 4729 | 285 | 9.869 3410 | 440   | 0.130 6590 | 9.905 1320 | 156 | 30 |    |
|    | 40 | 9.774 5014 | 284 | 9.869 3850 | 440   | 0.130 6150 | 9.905 1164 | 156 | 20 |    |
|    | 50 | 9.774 5298 | 285 | 9.869 4290 | 441   | 0.130 5710 | 9.905 1008 | 156 | 10 |    |
| 31 | 0  | 9.774 5583 | 284 | 9.869 4731 | 440   | 0.130 5269 | 9.905 0852 | 156 | 0  | 29 |
|    | 10 | 9.774 5867 | 284 | 9.869 5171 | 440   | 0.130 4829 | 9.905 0696 | 156 | 50 |    |
|    | 20 | 9.774 6151 | 285 | 9.869 5611 | 440   | 0.130 4389 | 9.905 0540 | 156 | 40 |    |
|    | 30 | 9.774 6436 | 284 | 9.869 6051 | 441   | 0.130 3949 | 9.905 0384 | 156 | 30 |    |
|    | 40 | 9.774 6720 | 284 | 9.869 6492 | 440   | 0.130 3508 | 9.905 0228 | 156 | 20 |    |
|    | 50 | 9.774 7004 | 284 | 9.869 6932 | 440   | 0.130 3068 | 9.905 0072 | 156 | 10 |    |
| 32 | 0  | 9.774 7288 | 285 | 9.869 7372 | 440   | 0.130 2628 | 9.904 9916 | 156 | 0  | 28 |
|    | 10 | 9.774 7573 | 284 | 9.869 7812 | 440   | 0.130 2188 | 9.904 9760 | 156 | 50 |    |
|    | 20 | 9.774 7857 | 284 | 9.869 8252 | 440   | 0.130 1748 | 9.904 9604 | 156 | 40 |    |
|    | 30 | 9.774 8141 | 284 | 9.869 8692 | 441   | 0.130 1308 | 9.904 9448 | 156 | 30 |    |
|    | 40 | 9.774 8425 | 284 | 9.869 9133 | 440   | 0.130 0867 | 9.904 9292 | 156 | 20 |    |
|    | 50 | 9.774 8709 | 284 | 9.869 9573 | 440   | 0.130 0427 | 9.904 9136 | 156 | 10 |    |
| 33 | 0  | 9.774 8993 | 284 | 9.870 0013 | 440   | 0.129 9987 | 9.904 8980 | 156 | 0  | 27 |
|    | 10 | 9.774 9277 | 284 | 9.870 0453 | 440   | 0.129 9547 | 9.904 8824 | 156 | 50 |    |
|    | 20 | 9.774 9561 | 284 | 9.870 0893 | 440   | 0.129 9107 | 9.904 8668 | 156 | 40 |    |
|    | 30 | 9.774 9845 | 284 | 9.870 1333 | 440   | 0.129 8667 | 9.904 8512 | 156 | 30 |    |
|    | 40 | 9.775 0129 | 284 | 9.870 1773 | 440   | 0.129 8227 | 9.904 8356 | 156 | 20 |    |
|    | 50 | 9.775 0413 | 284 | 9.870 2213 | 440   | 0.129 7787 | 9.904 8200 | 157 | 10 |    |
| 34 | 0  | 9.775 0697 | 284 | 9.870 2653 | 440   | 0.129 7347 | 9.904 8043 | 156 | 0  | 26 |
|    | 10 | 9.775 0981 | 283 | 9.870 3093 | 440   | 0.129 6907 | 9.904 7887 | 156 | 50 |    |
|    | 20 | 9.775 1264 | 284 | 9.870 3533 | 440   | 0.129 6467 | 9.904 7731 | 156 | 40 |    |
|    | 30 | 9.775 1548 | 284 | 9.870 3973 | 440   | 0.129 6027 | 9.904 7575 | 156 | 30 |    |
|    | 40 | 9.775 1832 | 284 | 9.870 4413 | 440   | 0.129 5587 | 9.904 7419 | 157 | 20 |    |
|    | 50 | 9.775 2116 | 283 | 9.870 4853 | 440   | 0.129 5147 | 9.904 7262 | 156 | 10 |    |
| 35 | 0  | 9.775 2399 | 284 | 9.870 5293 | 440   | 0.129 4707 | 9.904 7106 | 156 | 0  | 25 |
|    | 10 | 9.775 2683 | 284 | 9.870 5733 | 440   | 0.129 4267 | 9.904 6950 | 156 | 50 |    |
|    | 20 | 9.775 2967 | 283 | 9.870 6173 | 440   | 0.129 3827 | 9.904 6794 | 157 | 40 |    |
|    | 30 | 9.775 3250 | 284 | 9.870 6613 | 440   | 0.129 3387 | 9.904 6637 | 156 | 30 |    |
|    | 40 | 9.775 3534 | 283 | 9.870 7053 | 440   | 0.129 2947 | 9.904 6481 | 156 | 20 |    |
|    | 50 | 9.775 3817 | 284 | 9.870 7493 | 440   | 0.129 2507 | 9.904 6325 | 157 | 10 |    |
| 36 | 0  | 9.775 4101 | 283 | 9.870 7933 | 440   | 0.129 2067 | 9.904 6168 | 156 | 0  | 24 |
|    | 10 | 9.775 4384 | 284 | 9.870 8373 | 439   | 0.129 1627 | 9.904 6012 | 157 | 50 |    |
|    | 20 | 9.775 4668 | 283 | 9.870 8812 | 440   | 0.129 1188 | 9.904 5855 | 156 | 40 |    |
|    | 30 | 9.775 4951 | 284 | 9.870 9252 | 440   | 0.129 0748 | 9.904 5699 | 156 | 30 |    |
|    | 40 | 9.775 5235 | 283 | 9.870 9692 | 440   | 0.129 0308 | 9.904 5543 | 157 | 20 |    |
|    | 50 | 9.775 5518 | 283 | 9.871 0132 | 440   | 0.128 9868 | 9.904 5386 | 156 | 10 |    |
| 37 | 0  | 9.775 5801 | 284 | 9.871 0572 | 440   | 0.128 9428 | 9.904 5230 | 157 | 0  | 23 |
|    | 10 | 9.775 6085 | 283 | 9.871 1012 | 439   | 0.128 8988 | 9.904 5073 | 156 | 50 |    |
|    | 20 | 9.775 6368 | 283 | 9.871 1451 | 440   | 0.128 8549 | 9.904 4917 | 157 | 40 |    |
|    | 30 | 9.775 6651 | 284 | 9.871 1891 | 440   | 0.128 8109 | 9.904 4760 | 156 | 30 |    |
|    | 40 | 9.775 6935 | 283 | 9.871 2331 | 440   | 0.128 7669 | 9.904 4604 | 157 | 20 |    |
|    | 50 | 9.775 7218 | 283 | 9.871 2771 | 439   | 0.128 7229 | 9.904 4447 | 156 | 10 |    |
| 38 | 0  | 9.775 7501 | 283 | 9.871 3210 | 440   | 0.128 6790 | 9.904 4291 | 157 | 0  | 22 |
|    | 10 | 9.775 7784 | 283 | 9.871 3650 | 440   | 0.128 6350 | 9.904 4134 | 157 | 50 |    |
|    | 20 | 9.775 8067 | 283 | 9.871 4090 | 439   | 0.128 5910 | 9.904 3977 | 156 | 40 |    |
|    | 30 | 9.775 8350 | 283 | 9.871 4529 | 440   | 0.128 5471 | 9.904 3821 | 157 | 30 |    |
|    | 40 | 9.775 8633 | 283 | 9.871 4969 | 440   | 0.128 5031 | 9.904 3664 | 156 | 20 |    |
|    | 50 | 9.775 8916 | 283 | 9.871 5409 | 439   | 0.128 4591 | 9.904 3508 | 157 | 10 |    |
| 39 | 0  | 9.775 9199 | 283 | 9.871 5848 | 440   | 0.128 4152 | 9.904 3351 | 157 | 0  | 21 |
|    | 10 | 9.775 9482 | 283 | 9.871 6288 | 440   | 0.128 3712 | 9.904 3194 | 156 | 50 |    |
|    | 20 | 9.775 9765 | 283 | 9.871 6728 | 439   | 0.128 3272 | 9.904 3038 | 157 | 40 |    |
|    | 30 | 9.776 0048 | 283 | 9.871 7167 | 440   | 0.128 2833 | 9.904 2881 | 157 | 30 |    |
|    | 40 | 9.776 0331 | 283 | 9.871 7607 | 440   | 0.128 2393 | 9.904 2724 | 157 | 20 |    |
|    | 50 | 9.776 0614 | 283 | 9.871 8047 | 440   | 0.128 1953 | 9.904 2567 | 156 | 10 |    |
| 40 | 0  | 9.776 0897 | 283 | 9.871 8486 | 439   | 0.128 1514 | 9.904 2411 | 156 | 0  | 20 |
|    |    |            |     |            |       |            |            |     |    |    |
|    | "  | Cos        | d.  | Cotg       | d.c.  | Tang       | Sin        | d.  | "  |    |



|         |    | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d.  |    |    |
|---------|----|------------|-----|------------|-------|------------|------------|-----|----|----|
| 440     | 40 | 0.776 0897 | 283 | 9.871 8486 | 440   | 0.128 1514 | 9.904 2411 | 157 | 0  | 20 |
| 1 44.0  | 10 | 9.776 1180 | 282 | 9.871 8926 | 439   | 0.128 1074 | 9.904 2254 | 157 | 50 |    |
| 2 88.0  | 20 | 9.776 1462 | 283 | 9.871 9365 | 440   | 0.128 0635 | 9.904 2097 | 157 | 40 |    |
| 3 132.0 | 30 | 9.776 1745 | 283 | 9.871 9805 | 439   | 0.128 0195 | 9.904 1940 | 157 | 30 |    |
| 4 176.0 | 40 | 9.776 2028 | 283 | 9.872 0244 | 440   | 0.127 9756 | 9.904 1784 | 157 | 20 |    |
| 5 220.0 | 50 | 9.776 2311 | 282 | 9.872 0684 | 439   | 0.127 9316 | 9.904 1627 | 157 | 10 |    |
| 6 264.0 | 41 | 0.776 2593 | 283 | 9.872 1123 | 440   | 0.127 8877 | 9.904 1470 | 157 | 0  | 19 |
| 7 308.0 | 10 | 9.776 2876 | 282 | 9.872 1563 | 439   | 0.127 8437 | 9.904 1313 | 157 | 50 |    |
| 8 352.0 | 20 | 9.776 3158 | 283 | 9.872 2002 | 440   | 0.127 7998 | 9.904 1156 | 157 | 40 |    |
| 9 396.0 | 30 | 9.776 3441 | 283 | 9.872 2442 | 439   | 0.127 7558 | 9.904 0999 | 157 | 30 |    |
|         | 40 | 9.776 3724 | 282 | 9.872 2881 | 440   | 0.127 7119 | 9.904 0842 | 157 | 20 |    |
|         | 50 | 9.776 4006 | 283 | 9.872 3321 | 439   | 0.127 6679 | 9.904 0686 | 157 | 10 |    |
| 439     | 42 | 0.776 4289 | 282 | 9.872 3760 | 440   | 0.127 6240 | 9.904 0529 | 157 | 0  | 18 |
| 1 43.9  | 10 | 9.776 4571 | 283 | 9.872 4199 | 439   | 0.127 5801 | 9.904 0372 | 157 | 50 |    |
| 2 87.8  | 20 | 9.776 4854 | 282 | 9.872 4639 | 440   | 0.127 5361 | 9.904 0215 | 157 | 40 |    |
| 3 131.7 | 30 | 9.776 5136 | 282 | 9.872 5078 | 439   | 0.127 4922 | 9.904 0058 | 157 | 30 |    |
| 4 175.6 | 40 | 9.776 5418 | 283 | 9.872 5518 | 440   | 0.127 4482 | 9.903 9901 | 157 | 20 |    |
| 5 219.5 | 50 | 9.776 5701 | 282 | 9.872 5957 | 439   | 0.127 4043 | 9.903 9744 | 157 | 10 |    |
| 6 263.4 | 43 | 0.776 5983 | 282 | 9.872 6396 | 440   | 0.127 3604 | 9.903 9587 | 157 | 0  | 17 |
| 7 307.3 | 10 | 9.776 6265 | 283 | 9.872 6836 | 439   | 0.127 3164 | 9.903 9430 | 157 | 50 |    |
| 8 351.2 | 20 | 9.776 6548 | 282 | 9.872 7275 | 440   | 0.127 2725 | 9.903 9273 | 157 | 40 |    |
| 9 395.1 | 30 | 9.776 6830 | 282 | 9.872 7714 | 439   | 0.127 2286 | 9.903 9115 | 157 | 30 |    |
|         | 40 | 9.776 7112 | 282 | 9.872 8154 | 440   | 0.127 1846 | 9.903 8958 | 157 | 20 |    |
| 283     | 50 | 9.776 7394 | 282 | 9.872 8593 | 439   | 0.127 1407 | 9.903 8801 | 157 | 10 |    |
| 1 28.3  | 44 | 0.776 7676 | 282 | 9.872 9032 | 440   | 0.127 0968 | 9.903 8644 | 157 | 0  | 16 |
| 2 56.6  | 10 | 9.776 7958 | 283 | 9.872 9471 | 439   | 0.127 0529 | 9.903 8487 | 157 | 50 |    |
| 3 84.9  | 20 | 9.776 8241 | 282 | 9.872 9911 | 440   | 0.127 0089 | 9.903 8330 | 157 | 40 |    |
| 4 113.2 | 30 | 9.776 8523 | 282 | 9.873 0350 | 439   | 0.126 9650 | 9.903 8173 | 157 | 30 |    |
| 5 141.5 | 40 | 9.776 8805 | 282 | 9.873 0789 | 440   | 0.126 9211 | 9.903 8016 | 157 | 20 |    |
| 6 169.8 | 50 | 9.776 9087 | 282 | 9.873 1228 | 439   | 0.126 8772 | 9.903 7858 | 157 | 10 |    |
| 7 198.1 | 45 | 0.776 9369 | 282 | 9.873 1668 | 440   | 0.126 8332 | 9.903 7701 | 157 | 0  | 15 |
| 8 226.4 | 10 | 9.776 9651 | 281 | 9.873 2107 | 439   | 0.126 7893 | 9.903 7544 | 157 | 50 |    |
| 9 254.7 | 20 | 9.776 9932 | 282 | 9.873 2546 | 440   | 0.126 7454 | 9.903 7387 | 157 | 40 |    |
|         | 30 | 9.777 0214 | 282 | 9.873 2985 | 439   | 0.126 7015 | 9.903 7229 | 157 | 30 |    |
| 282     | 40 | 9.777 0496 | 282 | 9.873 3424 | 440   | 0.126 6576 | 9.903 7072 | 157 | 20 |    |
| 1 28.2  | 50 | 9.777 0778 | 282 | 9.873 3863 | 439   | 0.126 6137 | 9.903 6915 | 157 | 10 |    |
| 2 56.4  | 46 | 0.777 1060 | 282 | 9.873 4302 | 440   | 0.126 5698 | 9.903 6757 | 157 | 0  | 14 |
| 3 84.6  | 10 | 9.777 1342 | 281 | 9.873 4742 | 439   | 0.126 5258 | 9.903 6600 | 157 | 50 |    |
| 4 112.8 | 20 | 9.777 1623 | 282 | 9.873 5181 | 440   | 0.126 4819 | 9.903 6443 | 157 | 40 |    |
| 5 141.0 | 30 | 9.777 1905 | 282 | 9.873 5620 | 439   | 0.126 4380 | 9.903 6285 | 157 | 30 |    |
| 6 169.2 | 40 | 9.777 2187 | 281 | 9.873 6059 | 440   | 0.126 3941 | 9.903 6128 | 157 | 20 |    |
| 7 197.4 | 50 | 9.777 2468 | 282 | 9.873 6498 | 439   | 0.126 3502 | 9.903 5971 | 157 | 10 |    |
| 8 225.6 | 47 | 0.777 2750 | 282 | 9.873 6937 | 440   | 0.126 3063 | 9.903 5813 | 157 | 0  | 13 |
| 9 253.8 | 10 | 9.777 3032 | 281 | 9.873 7376 | 439   | 0.126 2624 | 9.903 5656 | 157 | 50 |    |
|         | 20 | 9.777 3313 | 282 | 9.873 7815 | 440   | 0.126 2185 | 9.903 5498 | 157 | 40 |    |
| 156     | 30 | 9.777 3595 | 281 | 9.873 8254 | 439   | 0.126 1746 | 9.903 5341 | 157 | 30 |    |
| 1 15.6  | 40 | 9.777 3876 | 282 | 9.873 8693 | 440   | 0.126 1307 | 9.903 5183 | 157 | 20 |    |
| 2 31.2  | 50 | 9.777 4158 | 281 | 9.873 9132 | 439   | 0.126 0868 | 9.903 5026 | 157 | 10 |    |
| 3 46.8  | 48 | 0.777 4439 | 282 | 9.873 9571 | 440   | 0.126 0429 | 9.903 4868 | 157 | 0  | 12 |
| 4 62.4  | 10 | 9.777 4721 | 281 | 9.874 0010 | 439   | 0.125 9990 | 9.903 4711 | 157 | 50 |    |
| 5 78.0  | 20 | 9.777 5002 | 282 | 9.874 0449 | 440   | 0.125 9551 | 9.903 4553 | 157 | 40 |    |
| 6 93.6  | 30 | 9.777 5284 | 281 | 9.874 0888 | 439   | 0.125 9112 | 9.903 4396 | 157 | 30 |    |
| 7 109.2 | 40 | 9.777 5565 | 281 | 9.874 1327 | 440   | 0.125 8673 | 9.903 4238 | 157 | 20 |    |
| 8 124.8 | 50 | 9.777 5846 | 282 | 9.874 1766 | 439   | 0.125 8234 | 9.903 4081 | 157 | 10 |    |
| 9 140.4 | 49 | 0.777 6128 | 281 | 9.874 2204 | 440   | 0.125 7795 | 9.903 3923 | 157 | 0  | 11 |
|         | 10 | 9.777 6409 | 281 | 9.874 2643 | 439   | 0.125 7357 | 9.903 3765 | 157 | 50 |    |
| 157     | 20 | 9.777 6690 | 281 | 9.874 3082 | 440   | 0.125 6918 | 9.903 3608 | 157 | 40 |    |
| 1 15.7  | 30 | 9.777 6971 | 281 | 9.874 3521 | 439   | 0.125 6479 | 9.903 3450 | 157 | 30 |    |
| 2 31.4  | 40 | 9.777 7252 | 282 | 9.874 3960 | 440   | 0.125 6040 | 9.903 3293 | 157 | 20 |    |
| 3 47.1  | 50 | 9.777 7534 | 281 | 9.874 4399 | 439   | 0.125 5601 | 9.903 3135 | 157 | 10 |    |
| 4 62.8  | 50 | 9.777 7815 | 281 | 9.874 4838 | 439   | 0.125 5162 | 9.903 2977 | 157 | 0  | 10 |
| 5 78.5  |    |            |     |            |       |            |            |     |    |    |
| 6 94.2  |    |            |     |            |       |            |            |     |    |    |
| 7 109.9 |    |            |     |            |       |            |            |     |    |    |
| 8 125.6 |    |            |     |            |       |            |            |     |    |    |
| 9 141.3 |    |            |     |            |       |            |            |     |    |    |
|         |    | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d.  |    |    |



|    |    | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d.  | "  |    |
|----|----|------------|-----|------------|-------|------------|------------|-----|----|----|
| 50 | o  | 9.777 7815 | 281 | 9.874 4838 | 438   | 0.125 5162 | 9.903 2977 | 158 | o  | 10 |
|    | 10 | 9.777 8096 | 281 | 9.874 5276 | 439   | 0.125 4724 | 9.903 2819 | 157 | 50 |    |
|    | 20 | 9.777 8377 | 281 | 9.874 5715 | 439   | 0.125 4285 | 9.903 2662 | 158 | 40 |    |
|    | 30 | 9.777 8658 | 281 | 9.874 6154 | 439   | 0.125 3846 | 9.903 2504 | 158 | 30 |    |
|    | 40 | 9.777 8939 | 281 | 9.874 6593 | 439   | 0.125 3407 | 9.903 2346 | 158 | 20 |    |
|    | 50 | 9.777 9220 | 281 | 9.874 7031 | 438   | 0.125 2969 | 9.903 2188 | 157 | 10 |    |
| 51 | o  | 9.777 9501 | 281 | 9.874 7470 | 439   | 0.125 2530 | 9.903 2031 | 158 | o  | 9  |
|    | 10 | 9.777 9782 | 281 | 9.874 7909 | 439   | 0.125 2091 | 9.903 1873 | 158 | 50 |    |
|    | 20 | 9.778 0063 | 281 | 9.874 8348 | 438   | 0.125 1652 | 9.903 1715 | 158 | 40 |    |
|    | 30 | 9.778 0344 | 280 | 9.874 8786 | 438   | 0.125 1214 | 9.903 1557 | 158 | 30 |    |
|    | 40 | 9.778 0624 | 281 | 9.874 9225 | 439   | 0.125 0775 | 9.903 1399 | 158 | 20 |    |
|    | 50 | 9.778 0905 | 281 | 9.874 9664 | 438   | 0.125 0336 | 9.903 1241 | 157 | 10 |    |
| 52 | o  | 9.778 1186 | 281 | 9.875 0102 | 439   | 0.124 9898 | 9.903 1084 | 158 | o  | 8  |
|    | 10 | 9.778 1467 | 280 | 9.875 0541 | 439   | 0.124 9459 | 9.903 0926 | 158 | 50 |    |
|    | 20 | 9.778 1747 | 281 | 9.875 0980 | 438   | 0.124 9020 | 9.903 0768 | 158 | 40 |    |
|    | 30 | 9.778 2028 | 281 | 9.875 1418 | 438   | 0.124 8582 | 9.903 0610 | 158 | 30 |    |
|    | 40 | 9.778 2309 | 280 | 9.875 1857 | 439   | 0.124 8143 | 9.903 0452 | 158 | 20 |    |
|    | 50 | 9.778 2589 | 281 | 9.875 2296 | 438   | 0.124 7704 | 9.903 0294 | 158 | 10 |    |
| 53 | o  | 9.778 2870 | 281 | 9.875 2734 | 439   | 0.124 7266 | 9.903 0136 | 158 | o  | 7  |
|    | 10 | 9.778 3151 | 280 | 9.875 3173 | 438   | 0.124 6827 | 9.902 9978 | 158 | 50 |    |
|    | 20 | 9.778 3431 | 281 | 9.875 3611 | 439   | 0.124 6389 | 9.902 9820 | 158 | 40 |    |
|    | 30 | 9.778 3712 | 280 | 9.875 4050 | 438   | 0.124 5950 | 9.902 9662 | 158 | 30 |    |
|    | 40 | 9.778 3992 | 281 | 9.875 4488 | 438   | 0.124 5512 | 9.902 9504 | 158 | 20 |    |
|    | 50 | 9.778 4273 | 280 | 9.875 4927 | 438   | 0.124 5073 | 9.902 9346 | 158 | 10 |    |
| 54 | o  | 9.778 4553 | 281 | 9.875 5365 | 439   | 0.124 4635 | 9.902 9188 | 158 | o  | 6  |
|    | 10 | 9.778 4834 | 280 | 9.875 5804 | 438   | 0.124 4196 | 9.902 9030 | 159 | 50 |    |
|    | 20 | 9.778 5114 | 280 | 9.875 6242 | 439   | 0.124 3758 | 9.902 8871 | 158 | 40 |    |
|    | 30 | 9.778 5394 | 281 | 9.875 6681 | 438   | 0.124 3319 | 9.902 8713 | 158 | 30 |    |
|    | 40 | 9.778 5675 | 280 | 9.875 7119 | 438   | 0.124 2881 | 9.902 8555 | 158 | 20 |    |
|    | 50 | 9.778 5955 | 280 | 9.875 7558 | 438   | 0.124 2442 | 9.902 8397 | 158 | 10 |    |
| 55 | o  | 9.778 6235 | 280 | 9.875 7996 | 439   | 0.124 2004 | 9.902 8239 | 158 | o  | 5  |
|    | 10 | 9.778 6515 | 281 | 9.875 8435 | 438   | 0.124 1565 | 9.902 8081 | 159 | 50 |    |
|    | 20 | 9.778 6796 | 280 | 9.875 8873 | 439   | 0.124 1127 | 9.902 7922 | 158 | 40 |    |
|    | 30 | 9.778 7076 | 280 | 9.875 9312 | 438   | 0.124 0688 | 9.902 7764 | 158 | 30 |    |
|    | 40 | 9.778 7356 | 280 | 9.875 9750 | 438   | 0.124 0250 | 9.902 7606 | 158 | 20 |    |
|    | 50 | 9.778 7636 | 280 | 9.876 0188 | 438   | 0.123 9812 | 9.902 7448 | 159 | 10 |    |
| 56 | o  | 9.778 7916 | 280 | 9.876 0627 | 438   | 0.123 9373 | 9.902 7289 | 158 | o  | 4  |
|    | 10 | 9.778 8196 | 280 | 9.876 1065 | 438   | 0.123 8935 | 9.902 7131 | 158 | 50 |    |
|    | 20 | 9.778 8476 | 280 | 9.876 1503 | 439   | 0.123 8497 | 9.902 6973 | 158 | 40 |    |
|    | 30 | 9.778 8756 | 280 | 9.876 1942 | 438   | 0.123 8058 | 9.902 6815 | 158 | 30 |    |
|    | 40 | 9.778 9036 | 280 | 9.876 2380 | 438   | 0.123 7620 | 9.902 6656 | 159 | 20 |    |
|    | 50 | 9.778 9316 | 280 | 9.876 2818 | 438   | 0.123 7182 | 9.902 6498 | 159 | 10 |    |
| 57 | o  | 9.778 9596 | 280 | 9.876 3257 | 438   | 0.123 6743 | 9.902 6339 | 158 | o  | 3  |
|    | 10 | 9.778 9876 | 280 | 9.876 3695 | 438   | 0.123 6305 | 9.902 6181 | 158 | 50 |    |
|    | 20 | 9.779 0156 | 280 | 9.876 4133 | 439   | 0.123 5867 | 9.902 6023 | 159 | 40 |    |
|    | 30 | 9.779 0436 | 280 | 9.876 4572 | 438   | 0.123 5428 | 9.902 5864 | 158 | 30 |    |
|    | 40 | 9.779 0716 | 280 | 9.876 5010 | 438   | 0.123 4990 | 9.902 5706 | 159 | 20 |    |
|    | 50 | 9.779 0996 | 279 | 9.876 5448 | 438   | 0.123 4552 | 9.902 5547 | 158 | 10 |    |
| 58 | o  | 9.779 1275 | 280 | 9.876 5886 | 439   | 0.123 4114 | 9.902 5389 | 159 | o  | 2  |
|    | 10 | 9.779 1555 | 280 | 9.876 6325 | 438   | 0.123 3675 | 9.902 5230 | 158 | 50 |    |
|    | 20 | 9.779 1835 | 279 | 9.876 6763 | 438   | 0.123 3237 | 9.902 5072 | 159 | 40 |    |
|    | 30 | 9.779 2114 | 280 | 9.876 7201 | 438   | 0.123 2799 | 9.902 4913 | 158 | 30 |    |
|    | 40 | 9.779 2394 | 280 | 9.876 7639 | 438   | 0.123 2361 | 9.902 4755 | 159 | 20 |    |
|    | 50 | 9.779 2674 | 279 | 9.876 8077 | 438   | 0.123 1923 | 9.902 4596 | 158 | 10 |    |
| 59 | o  | 9.779 2953 | 280 | 9.876 8515 | 439   | 0.123 1485 | 9.902 4438 | 159 | o  | 1  |
|    | 10 | 9.779 3233 | 279 | 9.876 8954 | 438   | 0.123 1046 | 9.902 4279 | 158 | 50 |    |
|    | 20 | 9.779 3512 | 280 | 9.876 9392 | 438   | 0.123 0608 | 9.902 4121 | 159 | 40 |    |
|    | 30 | 9.779 3792 | 280 | 9.876 9830 | 438   | 0.123 0170 | 9.902 3962 | 159 | 30 |    |
|    | 40 | 9.779 4071 | 279 | 9.877 0268 | 438   | 0.122 9732 | 9.902 3803 | 158 | 20 |    |
|    | 50 | 9.779 4351 | 279 | 9.877 0706 | 438   | 0.122 9294 | 9.902 3645 | 159 | 10 |    |
| 60 | o  | 9.779 4630 | 279 | 9.877 1144 | 438   | 0.122 8856 | 9.902 3486 | 159 | o  | 0  |
|    | "  | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d.  | "  |    |

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|----|----|------------|-----|------------|-------|------------|------------|-----|----|----|
| 0  | o  | 9.779 4630 | 280 | 9.877 1144 | 438   | 0.122 8856 | 9.902 3486 | 159 | o  | 60 |
|    | 10 | 9.779 4910 | 279 | 9.877 1582 | 438   | 0.122 8418 | 9.902 3327 | 158 | 50 |    |
|    | 20 | 9.779 5189 | 279 | 9.877 2020 | 438   | 0.122 7980 | 9.902 3169 | 159 | 40 |    |
|    | 30 | 9.779 5468 | 279 | 9.877 2458 | 438   | 0.122 7542 | 9.902 3010 | 159 | 30 |    |
|    | 40 | 9.779 5748 | 279 | 9.877 2896 | 438   | 0.122 7104 | 9.902 2851 | 158 | 20 |    |
|    | 50 | 9.779 6027 | 279 | 9.877 3334 | 438   | 0.122 6666 | 9.902 2693 | 159 | 10 |    |
| 1  | o  | 9.779 6306 | 279 | 9.877 3772 | 438   | 0.122 6228 | 9.902 2534 | 159 | o  | 59 |
|    | 10 | 9.779 6585 | 280 | 9.877 4210 | 438   | 0.122 5790 | 9.902 2375 | 159 | 50 |    |
|    | 20 | 9.779 6865 | 279 | 9.877 4648 | 438   | 0.122 5352 | 9.902 2216 | 159 | 40 |    |
|    | 30 | 9.779 7144 | 279 | 9.877 5086 | 438   | 0.122 4914 | 9.902 2058 | 159 | 30 |    |
|    | 40 | 9.779 7423 | 279 | 9.877 5524 | 438   | 0.122 4476 | 9.902 1899 | 159 | 20 |    |
|    | 50 | 9.779 7702 | 279 | 9.877 5962 | 438   | 0.122 4038 | 9.902 1740 | 159 | 10 |    |
| 2  | o  | 9.779 7981 | 279 | 9.877 6400 | 438   | 0.122 3600 | 9.902 1581 | 159 | o  | 58 |
|    | 10 | 9.779 8260 | 279 | 9.877 6838 | 438   | 0.122 3162 | 9.902 1422 | 159 | 50 |    |
|    | 20 | 9.779 8539 | 279 | 9.877 7276 | 438   | 0.122 2724 | 9.902 1263 | 159 | 40 |    |
|    | 30 | 9.779 8818 | 279 | 9.877 7714 | 438   | 0.122 2286 | 9.902 1104 | 158 | 30 |    |
|    | 40 | 9.779 9097 | 279 | 9.877 8152 | 438   | 0.122 1848 | 9.902 0946 | 159 | 20 |    |
|    | 50 | 9.779 9376 | 279 | 9.877 8590 | 437   | 0.122 1410 | 9.902 0787 | 159 | 10 |    |
| 3  | o  | 9.779 9655 | 279 | 9.877 9027 | 438   | 0.122 0973 | 9.902 0628 | 159 | o  | 57 |
|    | 10 | 9.779 9934 | 279 | 9.877 9465 | 438   | 0.122 0535 | 9.902 0469 | 159 | 50 |    |
|    | 20 | 9.780 0213 | 279 | 9.877 9903 | 438   | 0.122 0097 | 9.902 0310 | 159 | 40 |    |
|    | 30 | 9.780 0492 | 278 | 9.878 0341 | 438   | 0.121 9659 | 9.902 0151 | 159 | 30 |    |
|    | 40 | 9.780 0770 | 279 | 9.878 0779 | 438   | 0.121 9221 | 9.901 9992 | 159 | 20 |    |
|    | 50 | 9.780 1049 | 279 | 9.878 1217 | 437   | 0.121 8783 | 9.901 9833 | 159 | 10 |    |
| 4  | o  | 9.780 1328 | 279 | 9.878 1654 | 438   | 0.121 8346 | 9.901 9674 | 159 | o  | 56 |
|    | 10 | 9.780 1607 | 278 | 9.878 2092 | 438   | 0.121 7908 | 9.901 9515 | 159 | 50 |    |
|    | 20 | 9.780 1885 | 279 | 9.878 2530 | 438   | 0.121 7470 | 9.901 9356 | 160 | 40 |    |
|    | 30 | 9.780 2164 | 279 | 9.878 2968 | 437   | 0.121 7032 | 9.901 9196 | 159 | 30 |    |
|    | 40 | 9.780 2443 | 278 | 9.878 3405 | 438   | 0.121 6595 | 9.901 9037 | 159 | 20 |    |
|    | 50 | 9.780 2721 | 279 | 9.878 3843 | 438   | 0.121 6157 | 9.901 8878 | 159 | 10 |    |
| 5  | o  | 9.780 3000 | 278 | 9.878 4281 | 438   | 0.121 5719 | 9.901 8719 | 159 | o  | 55 |
|    | 10 | 9.780 3278 | 279 | 9.878 4719 | 437   | 0.121 5281 | 9.901 8560 | 159 | 50 |    |
|    | 20 | 9.780 3557 | 279 | 9.878 5156 | 438   | 0.121 4844 | 9.901 8401 | 159 | 40 |    |
|    | 30 | 9.780 3836 | 278 | 9.878 5594 | 438   | 0.121 4406 | 9.901 8242 | 160 | 30 |    |
|    | 40 | 9.780 4114 | 278 | 9.878 6032 | 437   | 0.121 3968 | 9.901 8082 | 159 | 20 |    |
|    | 50 | 9.780 4392 | 279 | 9.878 6469 | 438   | 0.121 3531 | 9.901 7923 | 159 | 10 |    |
| 6  | o  | 9.780 4671 | 278 | 9.878 6907 | 438   | 0.121 3093 | 9.901 7764 | 159 | o  | 54 |
|    | 10 | 9.780 4949 | 279 | 9.878 7345 | 437   | 0.121 2655 | 9.901 7605 | 160 | 50 |    |
|    | 20 | 9.780 5228 | 278 | 9.878 7782 | 438   | 0.121 2218 | 9.901 7445 | 159 | 40 |    |
|    | 30 | 9.780 5506 | 278 | 9.878 8220 | 437   | 0.121 1780 | 9.901 7286 | 159 | 30 |    |
|    | 40 | 9.780 5784 | 278 | 9.878 8657 | 438   | 0.121 1343 | 9.901 7127 | 159 | 20 |    |
|    | 50 | 9.780 6062 | 279 | 9.878 9095 | 438   | 0.121 0905 | 9.901 6968 | 160 | 10 |    |
| 7  | o  | 9.780 6341 | 278 | 9.878 9533 | 437   | 0.121 0467 | 9.901 6808 | 159 | o  | 53 |
|    | 10 | 9.780 6619 | 278 | 9.878 9970 | 438   | 0.121 0030 | 9.901 6649 | 159 | 50 |    |
|    | 20 | 9.780 6897 | 278 | 9.879 0408 | 437   | 0.120 9592 | 9.901 6490 | 160 | 40 |    |
|    | 30 | 9.780 7175 | 278 | 9.879 0845 | 438   | 0.120 9155 | 9.901 6330 | 159 | 30 |    |
|    | 40 | 9.780 7453 | 279 | 9.879 1283 | 437   | 0.120 8717 | 9.901 6171 | 159 | 20 |    |
|    | 50 | 9.780 7732 | 278 | 9.879 1720 | 438   | 0.120 8280 | 9.901 6011 | 160 | 10 |    |
| 8  | o  | 9.780 8010 | 278 | 9.879 2158 | 437   | 0.120 7842 | 9.901 5852 | 160 | o  | 52 |
|    | 10 | 9.780 8288 | 278 | 9.879 2595 | 438   | 0.120 7405 | 9.901 5692 | 159 | 50 |    |
|    | 20 | 9.780 8566 | 278 | 9.879 3033 | 437   | 0.120 6967 | 9.901 5533 | 159 | 40 |    |
|    | 30 | 9.780 8844 | 278 | 9.879 3470 | 438   | 0.120 6530 | 9.901 5374 | 160 | 30 |    |
|    | 40 | 9.780 9122 | 278 | 9.879 3908 | 437   | 0.120 6092 | 9.901 5214 | 159 | 20 |    |
|    | 50 | 9.780 9400 | 277 | 9.879 4345 | 437   | 0.120 5655 | 9.901 5055 | 160 | 10 |    |
| 9  | o  | 9.780 9677 | 278 | 9.879 4782 | 438   | 0.120 5218 | 9.901 4895 | 159 | o  | 51 |
|    | 10 | 9.780 9955 | 278 | 9.879 5220 | 437   | 0.120 4780 | 9.901 4736 | 160 | 50 |    |
|    | 20 | 9.781 0233 | 278 | 9.879 5657 | 438   | 0.120 4343 | 9.901 4576 | 160 | 40 |    |
|    | 30 | 9.781 0511 | 278 | 9.879 6095 | 437   | 0.120 3905 | 9.901 4416 | 159 | 30 |    |
|    | 40 | 9.781 0789 | 278 | 9.879 6532 | 437   | 0.120 3468 | 9.901 4257 | 160 | 20 |    |
|    | 50 | 9.781 1067 | 277 | 9.879 6969 | 438   | 0.120 3031 | 9.901 4097 | 159 | 10 |    |
| 10 | o  | 9.781 1344 | 277 | 9.879 7407 | 438   | 0.120 2593 | 9.901 3938 | 159 | o  | 50 |
|    | "  | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d.  | "  | i  |



|    | "  | Sum        | d.  | Tang       | d. c. | Cotg       | Cos        | d.  | "  |    |
|----|----|------------|-----|------------|-------|------------|------------|-----|----|----|
| 10 | 0  | 9.781 1344 | 278 | 9.879 7407 | 437   | 0.120 2593 | 9.901 3938 | 160 | 0  | 50 |
|    | 10 | 9.781 1622 | 278 | 9.879 7844 | 437   | 0.120 2156 | 9.901 3778 | 160 | 50 |    |
|    | 20 | 9.781 1900 | 277 | 9.879 8281 | 438   | 0.120 1719 | 9.901 3618 | 159 | 40 |    |
|    | 30 | 9.781 2177 | 278 | 9.879 8719 | 437   | 0.120 1281 | 9.901 3459 | 160 | 30 |    |
|    | 40 | 9.781 2455 | 278 | 9.879 9156 | 437   | 0.120 0844 | 9.901 3299 | 160 | 20 |    |
|    | 50 | 9.781 2733 | 277 | 9.879 9593 | 438   | 0.120 0407 | 9.901 3139 | 159 | 10 |    |
| 11 | 0  | 9.781 3010 | 278 | 9.880 0031 | 437   | 0.119 9969 | 9.901 2980 | 160 | 0  | 49 |
|    | 10 | 9.781 3288 | 277 | 9.880 0468 | 437   | 0.119 9532 | 9.901 2820 | 160 | 50 |    |
|    | 20 | 9.781 3565 | 278 | 9.880 0905 | 437   | 0.119 9095 | 9.901 2660 | 160 | 40 |    |
|    | 30 | 9.781 3843 | 277 | 9.880 1342 | 438   | 0.119 8658 | 9.901 2500 | 159 | 30 |    |
|    | 40 | 9.781 4120 | 278 | 9.880 1780 | 437   | 0.119 8220 | 9.901 2341 | 160 | 20 |    |
|    | 50 | 9.781 4398 | 277 | 9.880 2217 | 437   | 0.119 7783 | 9.901 2181 | 160 | 10 |    |
| 12 | 0  | 9.781 4675 | 277 | 9.880 2654 | 437   | 0.119 7346 | 9.901 2021 | 160 | 0  | 48 |
|    | 10 | 9.781 4952 | 278 | 9.880 3091 | 438   | 0.119 6909 | 9.901 1861 | 160 | 50 |    |
|    | 20 | 9.781 5230 | 277 | 9.880 3529 | 437   | 0.119 6471 | 9.901 1701 | 160 | 40 |    |
|    | 30 | 9.781 5507 | 278 | 9.880 3966 | 437   | 0.119 6034 | 9.901 1541 | 159 | 30 |    |
|    | 40 | 9.781 5784 | 277 | 9.880 4403 | 437   | 0.119 5597 | 9.901 1382 | 160 | 20 |    |
|    | 50 | 9.781 6062 | 277 | 9.880 4840 | 437   | 0.119 5160 | 9.901 1222 | 160 | 10 |    |
| 13 | 0  | 9.781 6339 | 277 | 9.880 5277 | 437   | 0.119 4723 | 9.901 1062 | 160 | 0  | 47 |
|    | 10 | 9.781 6616 | 277 | 9.880 5714 | 437   | 0.119 4286 | 9.901 0902 | 160 | 50 |    |
|    | 20 | 9.781 6893 | 277 | 9.880 6151 | 438   | 0.119 3849 | 9.901 0742 | 160 | 40 |    |
|    | 30 | 9.781 7170 | 278 | 9.880 6589 | 437   | 0.119 3411 | 9.901 0582 | 160 | 30 |    |
|    | 40 | 9.781 7448 | 277 | 9.880 7026 | 437   | 0.119 2974 | 9.901 0422 | 160 | 20 |    |
|    | 50 | 9.781 7725 | 277 | 9.880 7463 | 437   | 0.119 2537 | 9.901 0262 | 160 | 10 |    |
| 14 | 0  | 9.781 8002 | 277 | 9.880 7900 | 437   | 0.119 2100 | 9.901 0102 | 160 | 0  | 46 |
|    | 10 | 9.781 8279 | 277 | 9.880 8337 | 437   | 0.119 1663 | 9.900 9942 | 160 | 50 |    |
|    | 20 | 9.781 8556 | 277 | 9.880 8774 | 437   | 0.119 1226 | 9.900 9782 | 160 | 40 |    |
|    | 30 | 9.781 8833 | 277 | 9.880 9211 | 437   | 0.119 0789 | 9.900 9622 | 160 | 30 |    |
|    | 40 | 9.781 9110 | 277 | 9.880 9648 | 437   | 0.119 0352 | 9.900 9462 | 160 | 20 |    |
|    | 50 | 9.781 9387 | 277 | 9.881 0085 | 437   | 0.118 9915 | 9.900 9302 | 160 | 10 |    |
| 15 | 0  | 9.781 9664 | 276 | 9.881 0522 | 437   | 0.118 9478 | 9.900 9142 | 161 | 0  | 45 |
|    | 10 | 9.781 9940 | 277 | 9.881 0959 | 437   | 0.118 9041 | 9.900 8981 | 160 | 50 |    |
|    | 20 | 9.782 0217 | 277 | 9.881 1396 | 437   | 0.118 8604 | 9.900 8821 | 160 | 40 |    |
|    | 30 | 9.782 0494 | 277 | 9.881 1833 | 437   | 0.118 8167 | 9.900 8661 | 160 | 30 |    |
|    | 40 | 9.782 0771 | 277 | 9.881 2270 | 437   | 0.118 7730 | 9.900 8501 | 160 | 20 |    |
|    | 50 | 9.782 1048 | 276 | 9.881 2707 | 437   | 0.118 7293 | 9.900 8341 | 160 | 10 |    |
| 16 | 0  | 9.782 1324 | 277 | 9.881 3144 | 437   | 0.118 6856 | 9.900 8181 | 161 | 0  | 44 |
|    | 10 | 9.782 1601 | 277 | 9.881 3581 | 437   | 0.118 6419 | 9.900 8020 | 160 | 50 |    |
|    | 20 | 9.782 1878 | 276 | 9.881 4018 | 437   | 0.118 5982 | 9.900 7860 | 160 | 40 |    |
|    | 30 | 9.782 2154 | 277 | 9.881 4455 | 436   | 0.118 5545 | 9.900 7700 | 160 | 30 |    |
|    | 40 | 9.782 2431 | 277 | 9.881 4891 | 436   | 0.118 5109 | 9.900 7540 | 161 | 20 |    |
|    | 50 | 9.782 2708 | 276 | 9.881 5328 | 437   | 0.118 4672 | 9.900 7379 | 160 | 10 |    |
| 17 | 0  | 9.782 2984 | 277 | 9.881 5765 | 437   | 0.118 4235 | 9.900 7219 | 160 | 0  | 43 |
|    | 10 | 9.782 3261 | 276 | 9.881 6202 | 437   | 0.118 3798 | 9.900 7059 | 160 | 50 |    |
|    | 20 | 9.782 3537 | 277 | 9.881 6639 | 437   | 0.118 3361 | 9.900 6899 | 161 | 40 |    |
|    | 30 | 9.782 3814 | 276 | 9.881 7076 | 436   | 0.118 2924 | 9.900 6738 | 160 | 30 |    |
|    | 40 | 9.782 4090 | 277 | 9.881 7512 | 436   | 0.118 2488 | 9.900 6578 | 161 | 20 |    |
|    | 50 | 9.782 4367 | 276 | 9.881 7949 | 437   | 0.118 2051 | 9.900 6417 | 160 | 10 |    |
| 18 | 0  | 9.782 4643 | 276 | 9.881 8386 | 437   | 0.118 1614 | 9.900 6257 | 160 | 0  | 42 |
|    | 10 | 9.782 4919 | 277 | 9.881 8823 | 437   | 0.118 1177 | 9.900 6097 | 161 | 50 |    |
|    | 20 | 9.782 5196 | 276 | 9.881 9260 | 436   | 0.118 0740 | 9.900 5936 | 160 | 40 |    |
|    | 30 | 9.782 5472 | 276 | 9.881 9696 | 437   | 0.118 0304 | 9.900 5776 | 161 | 30 |    |
|    | 40 | 9.782 5748 | 277 | 9.882 0133 | 437   | 0.117 9867 | 9.900 5615 | 160 | 20 |    |
|    | 50 | 9.782 6025 | 276 | 9.882 0570 | 437   | 0.117 9430 | 9.900 5455 | 161 | 10 |    |
| 19 | 0  | 9.782 6301 | 276 | 9.882 1007 | 436   | 0.117 8993 | 9.900 5294 | 160 | 0  | 41 |
|    | 10 | 9.782 6577 | 276 | 9.882 1443 | 437   | 0.117 8557 | 9.900 5134 | 161 | 50 |    |
|    | 20 | 9.782 6853 | 276 | 9.882 1880 | 437   | 0.117 8120 | 9.900 4973 | 161 | 40 |    |
|    | 30 | 9.782 7129 | 277 | 9.882 2317 | 436   | 0.117 7683 | 9.900 4813 | 160 | 30 |    |
|    | 40 | 9.782 7406 | 276 | 9.882 2753 | 437   | 0.117 7247 | 9.900 4652 | 161 | 20 |    |
|    | 50 | 9.782 7682 | 276 | 9.882 3190 | 437   | 0.117 6810 | 9.900 4492 | 161 | 10 |    |
| 20 | 0  | 9.782 7958 | 276 | 9.882 3627 | 437   | 0.117 6373 | 9.900 4331 | 161 | 0  | 40 |

437

1 43.7

2 87.4

3 131.1

4 174.8

5 218.5

6 262.2

7 305.9

8 349.6

9 393.3

436

1 43.6

2 87.2

3 130.8

4 174.4

5 218.0

6 261.6

7 305.2

8 348.8

9 392.4

277

1 27.7

2 55.4

3 83.1

4 110.8

5 138.5

6 166.2

7 193.9

8 221.6

9 249.3

276

1 27.6

2 55.2

3 82.8

4 110.4

5 138.0

6 165.6

7 193.2

8 220.8

9 248.4

180

1 16.0

2 32.0

3 48.0

4 64.0

5 80.0

6 96.0

7 112.0

8 128.0

9 144.0

161

1 16.1

2 32.1

3 48.3

4 64.4

5 80.5

6 96.6

7 112.7

8 128.8

9 144.9



[illegible]



|    | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d.  | "  |    |
|----|----|------------|-----|------------|-------|------------|------------|-----|----|----|
| 30 | 0  | 9.784 4471 | 275 | 9.884 9805 | 436   | 0.115 0195 | 9.899 4667 | 162 | 0  | 30 |
|    | 10 | 9.784 4746 | 274 | 9.885 0241 | 436   | 0.114 9759 | 9.899 4505 | 162 | 50 |    |
|    | 20 | 9.784 5020 | 274 | 9.885 0677 | 436   | 0.114 9323 | 9.899 4343 | 162 | 40 |    |
|    | 30 | 9.784 5294 | 274 | 9.885 1113 | 436   | 0.114 8887 | 9.899 4182 | 162 | 30 |    |
|    | 40 | 9.784 5568 | 275 | 9.885 1548 | 435   | 0.114 8452 | 9.899 4020 | 162 | 20 |    |
|    | 50 | 9.784 5843 | 274 | 9.885 1984 | 436   | 0.114 8016 | 9.899 3859 | 162 | 10 |    |
| 31 | 0  | 9.784 6117 | 274 | 9.885 2420 | 436   | 0.114 7580 | 9.899 3697 | 162 | 0  | 29 |
|    | 10 | 9.784 6391 | 275 | 9.885 2856 | 436   | 0.114 7144 | 9.899 3535 | 162 | 50 |    |
|    | 20 | 9.784 6666 | 274 | 9.885 3292 | 436   | 0.114 6708 | 9.899 3374 | 162 | 40 |    |
|    | 30 | 9.784 6940 | 274 | 9.885 3728 | 436   | 0.114 6272 | 9.899 3212 | 162 | 30 |    |
|    | 40 | 9.784 7214 | 274 | 9.885 4164 | 436   | 0.114 5836 | 9.899 3050 | 162 | 20 |    |
|    | 50 | 9.784 7488 | 274 | 9.885 4600 | 435   | 0.114 5400 | 9.899 2888 | 162 | 10 |    |
| 32 | 0  | 9.784 7762 | 274 | 9.885 5035 | 435   | 0.114 4965 | 9.899 2727 | 162 | 0  | 28 |
|    | 10 | 9.784 8036 | 274 | 9.885 5471 | 436   | 0.114 4529 | 9.899 2565 | 162 | 50 |    |
|    | 20 | 9.784 8310 | 274 | 9.885 5907 | 436   | 0.114 4093 | 9.899 2403 | 162 | 40 |    |
|    | 30 | 9.784 8584 | 274 | 9.885 6343 | 436   | 0.114 3657 | 9.899 2241 | 162 | 30 |    |
|    | 40 | 9.784 8858 | 274 | 9.885 6779 | 435   | 0.114 3221 | 9.899 2079 | 162 | 20 |    |
|    | 50 | 9.784 9132 | 274 | 9.885 7214 | 435   | 0.114 2786 | 9.899 1918 | 162 | 10 |    |
| 33 | 0  | 9.784 9406 | 274 | 9.885 7650 | 436   | 0.114 2350 | 9.899 1756 | 162 | 0  | 27 |
|    | 10 | 9.784 9680 | 274 | 9.885 8086 | 436   | 0.114 1914 | 9.899 1594 | 162 | 50 |    |
|    | 20 | 9.784 9954 | 274 | 9.885 8522 | 436   | 0.114 1478 | 9.899 1432 | 162 | 40 |    |
|    | 30 | 9.785 0228 | 274 | 9.885 8957 | 435   | 0.114 1043 | 9.899 1270 | 162 | 30 |    |
|    | 40 | 9.785 0501 | 274 | 9.885 9393 | 436   | 0.114 0607 | 9.899 1108 | 162 | 20 |    |
|    | 50 | 9.785 0775 | 274 | 9.885 9829 | 435   | 0.114 0171 | 9.899 0946 | 162 | 10 |    |
| 34 | 0  | 9.785 1049 | 274 | 9.886 0264 | 436   | 0.113 9736 | 9.899 0784 | 162 | 0  | 26 |
|    | 10 | 9.785 1323 | 273 | 9.886 0700 | 436   | 0.113 9300 | 9.899 0622 | 162 | 50 |    |
|    | 20 | 9.785 1596 | 274 | 9.886 1136 | 436   | 0.113 8864 | 9.899 0460 | 162 | 40 |    |
|    | 30 | 9.785 1870 | 274 | 9.886 1572 | 435   | 0.113 8428 | 9.899 0298 | 162 | 30 |    |
|    | 40 | 9.785 2144 | 273 | 9.886 2007 | 436   | 0.113 7993 | 9.899 0136 | 162 | 20 |    |
|    | 50 | 9.785 2417 | 274 | 9.886 2443 | 435   | 0.113 7557 | 9.898 9974 | 162 | 10 |    |
| 35 | 0  | 9.785 2691 | 273 | 9.886 2878 | 436   | 0.113 7122 | 9.898 9812 | 162 | 0  | 25 |
|    | 10 | 9.785 2964 | 274 | 9.886 3314 | 436   | 0.113 6686 | 9.898 9650 | 162 | 50 |    |
|    | 20 | 9.785 3238 | 273 | 9.886 3750 | 435   | 0.113 6250 | 9.898 9488 | 162 | 40 |    |
|    | 30 | 9.785 3511 | 274 | 9.886 4185 | 436   | 0.113 5815 | 9.898 9326 | 162 | 30 |    |
|    | 40 | 9.785 3785 | 273 | 9.886 4621 | 435   | 0.113 5379 | 9.898 9164 | 162 | 20 |    |
|    | 50 | 9.785 4058 | 274 | 9.886 5056 | 436   | 0.113 4944 | 9.898 9002 | 162 | 10 |    |
| 36 | 0  | 9.785 4332 | 273 | 9.886 5492 | 435   | 0.113 4508 | 9.898 8840 | 162 | 0  | 24 |
|    | 10 | 9.785 4605 | 273 | 9.886 5927 | 436   | 0.113 4073 | 9.898 8678 | 162 | 50 |    |
|    | 20 | 9.785 4878 | 274 | 9.886 6363 | 436   | 0.113 3637 | 9.898 8515 | 162 | 40 |    |
|    | 30 | 9.785 5152 | 273 | 9.886 6799 | 435   | 0.113 3201 | 9.898 8353 | 162 | 30 |    |
|    | 40 | 9.785 5425 | 273 | 9.886 7234 | 436   | 0.113 2766 | 9.898 8191 | 162 | 20 |    |
|    | 50 | 9.785 5698 | 274 | 9.886 7670 | 435   | 0.113 2330 | 9.898 8029 | 162 | 10 |    |
| 37 | 0  | 9.785 5972 | 273 | 9.886 8105 | 436   | 0.113 1895 | 9.898 7867 | 162 | 0  | 23 |
|    | 10 | 9.785 6245 | 273 | 9.886 8541 | 435   | 0.113 1459 | 9.898 7704 | 162 | 50 |    |
|    | 20 | 9.785 6518 | 273 | 9.886 8976 | 435   | 0.113 1024 | 9.898 7542 | 162 | 40 |    |
|    | 30 | 9.785 6791 | 273 | 9.886 9411 | 436   | 0.113 0589 | 9.898 7380 | 162 | 30 |    |
|    | 40 | 9.785 7064 | 274 | 9.886 9847 | 435   | 0.113 0153 | 9.898 7218 | 162 | 20 |    |
|    | 50 | 9.785 7338 | 273 | 9.887 0282 | 436   | 0.112 9718 | 9.898 7055 | 162 | 10 |    |
| 38 | 0  | 9.785 7611 | 273 | 9.887 0718 | 435   | 0.112 9282 | 9.898 6893 | 162 | 0  | 22 |
|    | 10 | 9.785 7884 | 273 | 9.887 1153 | 436   | 0.112 8847 | 9.898 6731 | 162 | 50 |    |
|    | 20 | 9.785 8157 | 273 | 9.887 1589 | 435   | 0.112 8411 | 9.898 6568 | 162 | 40 |    |
|    | 30 | 9.785 8430 | 273 | 9.887 2024 | 435   | 0.112 7976 | 9.898 6406 | 162 | 30 |    |
|    | 40 | 9.785 8703 | 273 | 9.887 2459 | 436   | 0.112 7541 | 9.898 6243 | 162 | 20 |    |
|    | 50 | 9.785 8976 | 273 | 9.887 2895 | 435   | 0.112 7105 | 9.898 6081 | 162 | 10 |    |
| 39 | 0  | 9.785 9249 | 273 | 9.887 3330 | 435   | 0.112 6670 | 9.898 5919 | 162 | 0  | 21 |
|    | 10 | 9.785 9522 | 272 | 9.887 3765 | 436   | 0.112 6235 | 9.898 5756 | 162 | 50 |    |
|    | 20 | 9.785 9794 | 273 | 9.887 4201 | 435   | 0.112 5799 | 9.898 5594 | 162 | 40 |    |
|    | 30 | 9.786 0067 | 273 | 9.887 4636 | 435   | 0.112 5364 | 9.898 5431 | 162 | 30 |    |
|    | 40 | 9.786 0340 | 273 | 9.887 5071 | 435   | 0.112 4929 | 9.898 5269 | 162 | 20 |    |
|    | 50 | 9.786 0613 | 273 | 9.887 5507 | 435   | 0.112 4493 | 9.898 5106 | 162 | 10 |    |
| 40 | 0  | 9.786 0886 | 273 | 9.887 5942 | 435   | 0.112 4058 | 9.898 4944 | 162 | 0  | 20 |



|         |    | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d.  |    |    |
|---------|----|------------|-----|------------|-------|------------|------------|-----|----|----|
| 436     | 40 | 0.986 0886 | 272 | 9.887 5942 | 435   | 0.112 4058 | 9.898 4944 | 163 | 0  | 20 |
| 1 43.6  | 10 | 9.786 1158 | 273 | 9.887 6377 | 436   | 0.112 3623 | 9.898 4781 | 163 | 50 |    |
| 2 87.2  | 20 | 9.786 1431 | 273 | 9.887 6813 | 435   | 0.112 3187 | 9.898 4618 | 163 | 40 |    |
| 3 130.8 | 30 | 9.786 1704 | 272 | 9.887 7248 | 435   | 0.112 2752 | 9.898 4456 | 163 | 30 |    |
| 4 174.4 | 40 | 9.786 1976 | 273 | 9.887 7683 | 435   | 0.112 2317 | 9.898 4293 | 162 | 20 |    |
| 5 218.0 | 50 | 9.786 2249 | 273 | 9.887 8118 | 435   | 0.112 1882 | 9.898 4131 | 163 | 10 |    |
| 6 261.6 |    |            |     |            |       |            |            |     |    |    |
| 7 305.2 | 41 | 0.986 2522 | 272 | 9.887 8554 | 435   | 0.112 1446 | 9.898 3968 | 163 | 0  | 19 |
| 8 348.8 | 10 | 9.786 2794 | 273 | 9.887 8989 | 435   | 0.112 1011 | 9.898 3805 | 162 | 50 |    |
| 9 392.4 | 20 | 9.786 3067 | 272 | 9.887 9424 | 435   | 0.112 0576 | 9.898 3643 | 163 | 40 |    |
|         | 30 | 9.786 3339 | 273 | 9.887 9859 | 435   | 0.112 0141 | 9.898 3480 | 163 | 30 |    |
|         | 40 | 9.786 3612 | 273 | 9.888 0294 | 435   | 0.111 9706 | 9.898 3317 | 162 | 20 |    |
|         | 50 | 9.786 3884 | 272 | 9.888 0730 | 435   | 0.111 9270 | 9.898 3155 | 163 | 10 |    |
| 435     | 42 | 0.986 4157 | 272 | 9.888 1165 | 435   | 0.111 8835 | 9.898 2992 | 163 | 0  | 18 |
| 1 43.5  | 10 | 9.786 4429 | 272 | 9.888 1600 | 435   | 0.111 8400 | 9.898 2829 | 163 | 50 |    |
| 2 87.0  | 20 | 9.786 4701 | 272 | 9.888 2035 | 435   | 0.111 7965 | 9.898 2666 | 162 | 40 |    |
| 3 130.5 | 30 | 9.786 4974 | 273 | 9.888 2470 | 435   | 0.111 7530 | 9.898 2504 | 163 | 30 |    |
| 4 174.0 | 40 | 9.786 5246 | 272 | 9.888 2905 | 435   | 0.111 7095 | 9.898 2341 | 163 | 20 |    |
| 5 217.5 | 50 | 9.786 5518 | 273 | 9.888 3340 | 435   | 0.111 6660 | 9.898 2178 | 163 | 10 |    |
| 6 261.0 |    |            |     |            |       |            |            |     |    |    |
| 7 304.5 | 43 | 0.986 5791 | 272 | 9.888 3775 | 436   | 0.111 6225 | 9.898 2015 | 163 | 0  | 17 |
| 8 348.0 | 10 | 9.786 6063 | 272 | 9.888 4211 | 435   | 0.111 5789 | 9.898 1852 | 162 | 50 |    |
| 9 391.5 | 20 | 9.786 6335 | 272 | 9.888 4646 | 435   | 0.111 5354 | 9.898 1690 | 163 | 40 |    |
|         | 30 | 9.786 6607 | 272 | 9.888 5081 | 435   | 0.111 4919 | 9.898 1527 | 163 | 30 |    |
| 273     | 40 | 9.786 6880 | 273 | 9.888 5516 | 435   | 0.111 4484 | 9.898 1364 | 163 | 20 |    |
| 1 27.3  | 50 | 9.786 7152 | 272 | 9.888 5951 | 435   | 0.111 4049 | 9.898 1201 | 163 | 10 |    |
| 2 54.6  |    |            |     |            |       |            |            |     |    |    |
| 3 81.9  | 44 | 0.986 7424 | 272 | 9.888 6386 | 435   | 0.111 3614 | 9.898 1038 | 163 | 0  | 16 |
| 4 109.2 | 10 | 9.786 7696 | 272 | 9.888 6821 | 435   | 0.111 3179 | 9.898 0875 | 163 | 50 |    |
| 5 136.5 | 20 | 9.786 7968 | 272 | 9.888 7256 | 435   | 0.111 2744 | 9.898 0712 | 163 | 40 |    |
| 6 163.8 | 30 | 9.786 8240 | 272 | 9.888 7691 | 435   | 0.111 2309 | 9.898 0549 | 163 | 30 |    |
| 7 191.1 | 40 | 9.786 8512 | 272 | 9.888 8126 | 435   | 0.111 1874 | 9.898 0386 | 163 | 20 |    |
| 8 218.4 | 50 | 9.786 8784 | 272 | 9.888 8561 | 435   | 0.111 1439 | 9.898 0223 | 163 | 10 |    |
| 9 245.7 |    |            |     |            |       |            |            |     |    |    |
| 272     | 45 | 0.986 9056 | 272 | 9.888 8996 | 435   | 0.111 1004 | 9.898 0060 | 163 | 0  | 15 |
| 1 27.2  | 10 | 9.786 9328 | 272 | 9.888 9431 | 435   | 0.111 0569 | 9.897 9897 | 163 | 50 |    |
| 2 54.4  | 20 | 9.786 9600 | 272 | 9.888 9866 | 435   | 0.111 0134 | 9.897 9734 | 163 | 40 |    |
| 3 81.6  | 30 | 9.786 9872 | 271 | 9.889 0301 | 434   | 0.110 9699 | 9.897 9571 | 163 | 30 |    |
| 4 108.8 | 40 | 9.787 0143 | 271 | 9.889 0735 | 434   | 0.110 9265 | 9.897 9408 | 163 | 20 |    |
| 5 136.0 | 50 | 9.787 0415 | 272 | 9.889 1170 | 435   | 0.110 8830 | 9.897 9245 | 163 | 10 |    |
| 6 163.2 |    |            |     |            |       |            |            |     |    |    |
| 7 190.4 | 46 | 0.987 0687 | 272 | 9.889 1605 | 435   | 0.110 8395 | 9.897 9082 | 163 | 0  | 14 |
| 8 217.6 | 10 | 9.787 0959 | 271 | 9.889 2040 | 435   | 0.110 7960 | 9.897 8919 | 164 | 50 |    |
| 9 244.8 | 20 | 9.787 1230 | 272 | 9.889 2475 | 435   | 0.110 7525 | 9.897 8755 | 163 | 40 |    |
|         | 30 | 9.787 1502 | 272 | 9.889 2910 | 435   | 0.110 7090 | 9.897 8592 | 163 | 30 |    |
|         | 40 | 9.787 1774 | 271 | 9.889 3345 | 435   | 0.110 6655 | 9.897 8429 | 163 | 20 |    |
|         | 50 | 9.787 2045 | 272 | 9.889 3780 | 434   | 0.110 6220 | 9.897 8266 | 163 | 10 |    |
| 162     | 47 | 0.987 2317 | 272 | 9.889 4214 | 435   | 0.110 5786 | 9.897 8103 | 164 | 0  | 13 |
| 1 16.2  | 10 | 9.787 2589 | 271 | 9.889 4649 | 435   | 0.110 5351 | 9.897 7939 | 163 | 50 |    |
| 2 32.4  | 20 | 9.787 2860 | 272 | 9.889 5084 | 435   | 0.110 4916 | 9.897 7776 | 163 | 40 |    |
| 3 48.6  | 30 | 9.787 3132 | 271 | 9.889 5519 | 435   | 0.110 4481 | 9.897 7613 | 163 | 30 |    |
| 4 64.8  | 40 | 9.787 3403 | 272 | 9.889 5954 | 435   | 0.110 4046 | 9.897 7450 | 163 | 20 |    |
| 5 81.0  | 50 | 9.787 3675 | 271 | 9.889 6388 | 434   | 0.110 3612 | 9.897 7286 | 163 | 10 |    |
| 6 97.2  |    |            |     |            |       |            |            |     |    |    |
| 7 113.4 | 48 | 0.987 3946 | 272 | 9.889 6823 | 435   | 0.110 3177 | 9.897 7123 | 163 | 0  | 12 |
| 8 129.6 | 10 | 9.787 4218 | 271 | 9.889 7258 | 435   | 0.110 2742 | 9.897 6960 | 164 | 50 |    |
| 9 145.8 | 20 | 9.787 4489 | 271 | 9.889 7693 | 434   | 0.110 2307 | 9.897 6796 | 163 | 40 |    |
|         | 30 | 9.787 4760 | 272 | 9.889 8127 | 435   | 0.110 1873 | 9.897 6633 | 163 | 30 |    |
|         | 40 | 9.787 5032 | 271 | 9.889 8562 | 435   | 0.110 1438 | 9.897 6470 | 163 | 20 |    |
|         | 50 | 9.787 5303 | 271 | 9.889 8997 | 435   | 0.110 1003 | 9.897 6306 | 163 | 10 |    |
| 163     | 49 | 0.987 5574 | 272 | 9.889 9432 | 434   | 0.110 0568 | 9.897 6143 | 164 | 0  | 11 |
| 1 16.3  | 10 | 9.787 5846 | 271 | 9.889 9866 | 435   | 0.110 0134 | 9.897 5979 | 163 | 50 |    |
| 2 32.6  | 20 | 9.787 6117 | 271 | 9.890 0301 | 435   | 0.109 9699 | 9.897 5816 | 164 | 40 |    |
| 3 48.9  | 30 | 9.787 6388 | 271 | 9.890 0736 | 434   | 0.109 9264 | 9.897 5652 | 163 | 30 |    |
| 4 65.2  | 40 | 9.787 6659 | 271 | 9.890 1170 | 435   | 0.109 8830 | 9.897 5489 | 164 | 20 |    |
| 5 81.5  | 50 | 9.787 6930 | 272 | 9.890 1605 | 435   | 0.109 8395 | 9.897 5325 | 163 | 10 |    |
| 6 97.8  |    |            |     |            |       |            |            |     |    |    |
| 7 114.1 | 50 | 9.787 7202 | 272 | 9.890 2040 | 435   | 0.109 7960 | 9.897 5162 | 163 | 0  | 10 |
| 8 130.4 |    |            |     |            |       |            |            |     |    |    |
| 9 146.7 |    |            |     |            |       |            |            |     |    |    |
|         |    | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d.  |    |    |



| "  | " | Sta        | d.  | Tang       | d. c. | Cotg       | Cos        | d.  | "  | "       |
|----|---|------------|-----|------------|-------|------------|------------|-----|----|---------|
| 50 | o | 9.787 7202 | 271 | 9.890 2040 | 434   | 0.109 7960 | 9.897 5162 | 164 | o  | 10      |
| 10 |   | 9.787 7473 | 271 | 9.890 2474 | 435   | 0.109 7526 | 9.897 4998 | 163 | 50 | 434     |
| 20 |   | 9.787 7744 | 271 | 9.890 2909 | 434   | 0.109 7091 | 9.897 4835 | 164 | 40 | 1 43.4  |
| 30 |   | 9.787 8015 | 271 | 9.890 3343 | 435   | 0.109 6657 | 9.897 4671 | 163 | 30 | 2 86.3  |
| 40 |   | 9.787 8286 | 271 | 9.890 3778 | 435   | 0.109 6222 | 9.897 4508 | 164 | 20 | 3 130.2 |
| 50 |   | 9.787 8557 | 271 | 9.890 4213 | 435   | 0.109 5787 | 9.897 4344 | 163 | 10 | 4 173.6 |
| 51 | o | 9.787 8828 | 271 | 9.890 4647 | 434   | 0.109 5353 | 9.897 4181 | 164 | o  | 5 217.0 |
| 10 |   | 9.787 9099 | 271 | 9.890 5082 | 435   | 0.109 4918 | 9.897 4017 | 164 | 50 | 6 260.4 |
| 20 |   | 9.787 9370 | 270 | 9.890 5516 | 435   | 0.109 4484 | 9.897 3853 | 163 | 40 | 7 303.8 |
| 30 |   | 9.787 9640 | 271 | 9.890 5951 | 434   | 0.109 4049 | 9.897 3690 | 164 | 30 | 8 347.2 |
| 40 |   | 9.787 9911 | 271 | 9.890 6385 | 435   | 0.109 3615 | 9.897 3526 | 164 | 20 | 9 390.6 |
| 50 |   | 9.788 0182 | 271 | 9.890 6820 | 434   | 0.109 3180 | 9.897 3362 | 163 | 10 |         |
| 52 | o | 9.788 0453 | 271 | 9.890 7254 | 435   | 0.109 2746 | 9.897 3199 | 164 | o  | 271     |
| 10 |   | 9.788 0724 | 271 | 9.890 7689 | 434   | 0.109 2311 | 9.897 3035 | 164 | 50 | 1 27.1  |
| 20 |   | 9.788 0995 | 270 | 9.890 8123 | 435   | 0.109 1877 | 9.897 2871 | 164 | 40 | 2 54.2  |
| 30 |   | 9.788 1265 | 271 | 9.890 8558 | 435   | 0.109 1442 | 9.897 2707 | 163 | 30 | 3 81.3  |
| 40 |   | 9.788 1536 | 271 | 9.890 8992 | 434   | 0.109 1008 | 9.897 2544 | 164 | 20 | 4 103.4 |
| 50 |   | 9.788 1807 | 270 | 9.890 9427 | 435   | 0.109 0573 | 9.897 2380 | 164 | 10 | 5 135.5 |
| 53 | o | 9.788 2077 | 271 | 9.890 9861 | 434   | 0.109 0139 | 9.897 2216 | 164 | o  | 6 164.6 |
| 10 |   | 9.788 2348 | 270 | 9.891 0296 | 435   | 0.108 9704 | 9.897 2052 | 164 | 50 | 7 189.7 |
| 20 |   | 9.788 2618 | 271 | 9.891 0730 | 435   | 0.108 9270 | 9.897 1888 | 164 | 40 | 8 216.8 |
| 30 |   | 9.788 2889 | 271 | 9.891 1165 | 434   | 0.108 8835 | 9.897 1724 | 163 | 30 | 9 243.9 |
| 40 |   | 9.788 3160 | 271 | 9.891 1599 | 434   | 0.108 8401 | 9.897 1561 | 164 | 20 |         |
| 50 |   | 9.788 3430 | 271 | 9.891 2033 | 435   | 0.108 7967 | 9.897 1397 | 164 | 10 | 270     |
| 54 | o | 9.788 3701 | 270 | 9.891 2468 | 434   | 0.108 7532 | 9.897 1233 | 164 | o  | 1 27.0  |
| 10 |   | 9.788 3971 | 270 | 9.891 2902 | 434   | 0.108 7098 | 9.897 1069 | 164 | 50 | 2 54.0  |
| 20 |   | 9.788 4241 | 271 | 9.891 3336 | 435   | 0.108 6664 | 9.897 0905 | 164 | 40 | 3 81.0  |
| 30 |   | 9.788 4512 | 271 | 9.891 3771 | 434   | 0.108 6229 | 9.897 0741 | 164 | 30 | 4 108.0 |
| 40 |   | 9.788 4782 | 271 | 9.891 4205 | 434   | 0.108 5795 | 9.897 0577 | 164 | 20 | 5 135.0 |
| 50 |   | 9.788 5053 | 270 | 9.891 4639 | 435   | 0.108 5361 | 9.897 0413 | 164 | 10 | 6 162.0 |
| 55 | o | 9.788 5323 | 270 | 9.891 5074 | 434   | 0.108 4926 | 9.897 0249 | 164 | o  | 7 189.0 |
| 10 |   | 9.788 5593 | 270 | 9.891 5508 | 434   | 0.108 4492 | 9.897 0085 | 164 | 50 | 8 216.0 |
| 20 |   | 9.788 5863 | 271 | 9.891 5942 | 435   | 0.108 4058 | 9.896 9921 | 164 | 40 | 9 243.0 |
| 30 |   | 9.788 6134 | 270 | 9.891 6377 | 434   | 0.108 3623 | 9.896 9757 | 164 | 30 |         |
| 40 |   | 9.788 6404 | 270 | 9.891 6811 | 434   | 0.108 3189 | 9.896 9593 | 164 | 20 | 1 26.9  |
| 50 |   | 9.788 6674 | 270 | 9.891 7245 | 434   | 0.108 2755 | 9.896 9429 | 164 | 10 | 2 53.8  |
| 56 | o | 9.788 6944 | 270 | 9.891 7679 | 435   | 0.108 2321 | 9.896 9265 | 164 | o  | 3 80.7  |
| 10 |   | 9.788 7214 | 270 | 9.891 8114 | 434   | 0.108 1886 | 9.896 9101 | 165 | 50 | 4 107.6 |
| 20 |   | 9.788 7484 | 270 | 9.891 8548 | 434   | 0.108 1452 | 9.896 8936 | 164 | 40 | 5 134.5 |
| 30 |   | 9.788 7754 | 271 | 9.891 8982 | 434   | 0.108 1018 | 9.896 8772 | 164 | 30 | 6 161.4 |
| 40 |   | 9.788 8025 | 270 | 9.891 9416 | 435   | 0.108 0584 | 9.896 8608 | 164 | 20 | 7 188.3 |
| 50 |   | 9.788 8295 | 270 | 9.891 9851 | 434   | 0.108 0149 | 9.896 8444 | 164 | 10 | 8 215.2 |
| 57 | o | 9.788 8565 | 269 | 9.892 0285 | 434   | 0.107 9715 | 9.896 8280 | 164 | o  | 9 242.1 |
| 10 |   | 9.788 8834 | 270 | 9.892 0719 | 434   | 0.107 9281 | 9.896 8116 | 165 | 50 |         |
| 20 |   | 9.788 9104 | 270 | 9.892 1153 | 434   | 0.107 8847 | 9.896 7951 | 164 | 40 | 164     |
| 30 |   | 9.788 9374 | 270 | 9.892 1587 | 434   | 0.107 8413 | 9.896 7787 | 164 | 30 | 1 16.4  |
| 40 |   | 9.788 9644 | 270 | 9.892 2021 | 435   | 0.107 7979 | 9.896 7623 | 164 | 20 | 2 31.8  |
| 50 |   | 9.788 9914 | 270 | 9.892 2456 | 434   | 0.107 7544 | 9.896 7459 | 165 | 10 | 3 49.0  |
| 58 | o | 9.789 0184 | 270 | 9.892 2890 | 434   | 0.107 7110 | 9.896 7294 | 164 | o  | 4 65.6  |
| 10 |   | 9.789 0454 | 269 | 9.892 3324 | 434   | 0.107 6676 | 9.896 7130 | 164 | 50 | 5 81.0  |
| 20 |   | 9.789 0723 | 270 | 9.892 3758 | 434   | 0.107 6242 | 9.896 6966 | 165 | 40 | 6 98.4  |
| 30 |   | 9.789 0993 | 270 | 9.892 4192 | 434   | 0.107 5808 | 9.896 6801 | 164 | 30 | 7 114.8 |
| 40 |   | 9.789 1263 | 270 | 9.892 4626 | 434   | 0.107 5374 | 9.896 6637 | 164 | 20 | 8 131.8 |
| 50 |   | 9.789 1533 | 269 | 9.892 5060 | 434   | 0.107 4940 | 9.896 6473 | 165 | 10 | 9 147.6 |
| 59 | o | 9.789 1802 | 270 | 9.892 5494 | 434   | 0.107 4506 | 9.896 6308 | 164 | o  |         |
| 10 |   | 9.789 2072 | 270 | 9.892 5928 | 434   | 0.107 4072 | 9.896 6144 | 165 | 50 | 185     |
| 20 |   | 9.789 2342 | 269 | 9.892 6362 | 434   | 0.107 3638 | 9.896 5979 | 164 | 40 | 1 16.5  |
| 30 |   | 9.789 2611 | 270 | 9.892 6796 | 434   | 0.107 3204 | 9.896 5815 | 164 | 30 | 2 33.0  |
| 40 |   | 9.789 2881 | 269 | 9.892 7230 | 434   | 0.107 2770 | 9.896 5650 | 164 | 20 | 3 49.5  |
| 50 |   | 9.789 3150 | 270 | 9.892 7664 | 434   | 0.107 2336 | 9.896 5486 | 165 | 10 | 4 66.0  |
| 60 | o | 9.789 3420 | 270 | 9.892 8098 | 434   | 0.107 1902 | 9.896 5321 | 165 | o  | 5 81.5  |
|    |   |            |     |            |       |            |            |     |    | 6 99.0  |
|    |   |            |     |            |       |            |            |     |    | 7 115.5 |
|    |   |            |     |            |       |            |            |     |    | 8 132.0 |
|    |   |            |     |            |       |            |            |     |    | 9 148   |



434  
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9 148.5

|    |    | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d.  |    |    |
|----|----|------------|-----|------------|-------|------------|------------|-----|----|----|
| 0  | 0  | 9.789 3420 | 269 | 9.892 8098 | 434   | 0.107 1902 | 9.896 5321 | 164 | 0  | 60 |
|    | 10 | 9.789 3689 | 270 | 9.892 8532 | 434   | 0.107 1468 | 9.896 5157 | 165 | 50 |    |
|    | 20 | 9.789 3959 | 269 | 9.892 8966 | 434   | 0.107 1034 | 9.896 4992 | 164 | 40 |    |
|    | 30 | 9.789 4228 | 269 | 9.892 9400 | 434   | 0.107 0600 | 9.896 4828 | 165 | 30 |    |
|    | 40 | 9.789 4498 | 269 | 9.892 9834 | 434   | 0.107 0166 | 9.896 4663 | 164 | 20 |    |
|    | 50 | 9.789 4767 | 269 | 9.893 0268 | 434   | 0.106 9732 | 9.896 4499 | 165 | 10 |    |
| 1  | 0  | 9.789 5036 | 270 | 9.893 0702 | 434   | 0.106 9298 | 9.896 4334 | 164 | 0  | 59 |
|    | 10 | 9.789 5306 | 269 | 9.893 1136 | 434   | 0.106 8864 | 9.896 4170 | 165 | 50 |    |
|    | 20 | 9.789 5575 | 269 | 9.893 1570 | 434   | 0.106 8430 | 9.896 4005 | 164 | 40 |    |
|    | 30 | 9.789 5844 | 269 | 9.893 2004 | 434   | 0.106 7996 | 9.896 3840 | 165 | 30 |    |
|    | 40 | 9.789 6113 | 270 | 9.893 2438 | 434   | 0.106 7562 | 9.896 3676 | 164 | 20 |    |
|    | 50 | 9.789 6383 | 269 | 9.893 2872 | 434   | 0.106 7128 | 9.896 3511 | 165 | 10 |    |
| 2  | 0  | 9.789 6652 | 269 | 9.893 3306 | 433   | 0.106 6694 | 9.896 3346 | 164 | 0  | 58 |
|    | 10 | 9.789 6921 | 269 | 9.893 3739 | 434   | 0.106 6261 | 9.896 3182 | 165 | 50 |    |
|    | 20 | 9.789 7190 | 269 | 9.893 4173 | 434   | 0.106 5827 | 9.896 3017 | 164 | 40 |    |
|    | 30 | 9.789 7459 | 269 | 9.893 4607 | 434   | 0.106 5393 | 9.896 2852 | 165 | 30 |    |
|    | 40 | 9.789 7728 | 269 | 9.893 5041 | 434   | 0.106 4959 | 9.896 2687 | 164 | 20 |    |
|    | 50 | 9.789 7997 | 269 | 9.893 5475 | 434   | 0.106 4525 | 9.896 2523 | 165 | 10 |    |
| 3  | 0  | 9.789 8266 | 269 | 9.893 5909 | 433   | 0.106 4091 | 9.896 2358 | 164 | 0  | 57 |
|    | 10 | 9.789 8535 | 269 | 9.893 6342 | 434   | 0.106 3658 | 9.896 2193 | 165 | 50 |    |
|    | 20 | 9.789 8804 | 269 | 9.893 6776 | 434   | 0.106 3224 | 9.896 2028 | 164 | 40 |    |
|    | 30 | 9.789 9073 | 269 | 9.893 7210 | 434   | 0.106 2790 | 9.896 1863 | 165 | 30 |    |
|    | 40 | 9.789 9342 | 269 | 9.893 7644 | 433   | 0.106 2356 | 9.896 1698 | 164 | 20 |    |
|    | 50 | 9.789 9611 | 269 | 9.893 8077 | 434   | 0.106 1923 | 9.896 1534 | 165 | 10 |    |
| 4  | 0  | 9.789 9880 | 269 | 9.893 8511 | 434   | 0.106 1489 | 9.896 1369 | 164 | 0  | 56 |
|    | 10 | 9.790 0149 | 269 | 9.893 8945 | 434   | 0.106 1055 | 9.896 1204 | 165 | 50 |    |
|    | 20 | 9.790 0418 | 268 | 9.893 9379 | 434   | 0.106 0621 | 9.896 1039 | 164 | 40 |    |
|    | 30 | 9.790 0686 | 269 | 9.893 9812 | 433   | 0.106 0188 | 9.896 0874 | 165 | 30 |    |
|    | 40 | 9.790 0955 | 269 | 9.894 0246 | 434   | 0.105 9754 | 9.896 0709 | 164 | 20 |    |
|    | 50 | 9.790 1224 | 269 | 9.894 0680 | 434   | 0.105 9320 | 9.896 0544 | 165 | 10 |    |
| 5  | 0  | 9.790 1493 | 268 | 9.894 1114 | 433   | 0.105 8886 | 9.896 0379 | 164 | 0  | 55 |
|    | 10 | 9.790 1761 | 269 | 9.894 1547 | 434   | 0.105 8453 | 9.896 0214 | 165 | 50 |    |
|    | 20 | 9.790 2030 | 268 | 9.894 1981 | 434   | 0.105 8019 | 9.896 0049 | 164 | 40 |    |
|    | 30 | 9.790 2298 | 269 | 9.894 2415 | 434   | 0.105 7585 | 9.895 9884 | 165 | 30 |    |
|    | 40 | 9.790 2567 | 269 | 9.894 2848 | 433   | 0.105 7152 | 9.895 9719 | 164 | 20 |    |
|    | 50 | 9.790 2836 | 268 | 9.894 3282 | 433   | 0.105 6718 | 9.895 9554 | 165 | 10 |    |
| 6  | 0  | 9.790 3104 | 269 | 9.894 3715 | 434   | 0.105 6285 | 9.895 9389 | 164 | 0  | 54 |
|    | 10 | 9.790 3373 | 268 | 9.894 4149 | 434   | 0.105 5851 | 9.895 9224 | 165 | 50 |    |
|    | 20 | 9.790 3641 | 269 | 9.894 4583 | 433   | 0.105 5417 | 9.895 9059 | 164 | 40 |    |
|    | 30 | 9.790 3910 | 268 | 9.894 5016 | 434   | 0.105 4984 | 9.895 8893 | 165 | 30 |    |
|    | 40 | 9.790 4178 | 268 | 9.894 5450 | 434   | 0.105 4550 | 9.895 8728 | 164 | 20 |    |
|    | 50 | 9.790 4446 | 269 | 9.894 5883 | 433   | 0.105 4117 | 9.895 8563 | 165 | 10 |    |
| 7  | 0  | 9.790 4715 | 268 | 9.894 6317 | 434   | 0.105 3683 | 9.895 8398 | 164 | 0  | 53 |
|    | 10 | 9.790 4983 | 269 | 9.894 6751 | 433   | 0.105 3249 | 9.895 8233 | 165 | 50 |    |
|    | 20 | 9.790 5252 | 268 | 9.894 7184 | 434   | 0.105 2816 | 9.895 8067 | 164 | 40 |    |
|    | 30 | 9.790 5520 | 268 | 9.894 7618 | 433   | 0.105 2382 | 9.895 7902 | 165 | 30 |    |
|    | 40 | 9.790 5788 | 268 | 9.894 8051 | 434   | 0.105 1949 | 9.895 7737 | 164 | 20 |    |
|    | 50 | 9.790 6056 | 269 | 9.894 8485 | 433   | 0.105 1515 | 9.895 7572 | 165 | 10 |    |
| 8  | 0  | 9.790 6325 | 268 | 9.894 8918 | 434   | 0.105 1082 | 9.895 7406 | 164 | 0  | 52 |
|    | 10 | 9.790 6593 | 268 | 9.894 9352 | 433   | 0.105 0648 | 9.895 7241 | 165 | 50 |    |
|    | 20 | 9.790 6861 | 268 | 9.894 9785 | 434   | 0.105 0215 | 9.895 7076 | 164 | 40 |    |
|    | 30 | 9.790 7129 | 268 | 9.895 0219 | 433   | 0.104 9781 | 9.895 6910 | 165 | 30 |    |
|    | 40 | 9.790 7397 | 268 | 9.895 0652 | 433   | 0.104 9348 | 9.895 6745 | 164 | 20 |    |
|    | 50 | 9.790 7665 | 268 | 9.895 1085 | 434   | 0.104 8915 | 9.895 6580 | 165 | 10 |    |
| 9  | 0  | 9.790 7933 | 268 | 9.895 1519 | 433   | 0.104 8481 | 9.895 6414 | 164 | 0  | 51 |
|    | 10 | 9.790 8201 | 268 | 9.895 1952 | 434   | 0.104 8048 | 9.895 6249 | 165 | 50 |    |
|    | 20 | 9.790 8469 | 268 | 9.895 2386 | 433   | 0.104 7614 | 9.895 6084 | 164 | 40 |    |
|    | 30 | 9.790 8737 | 268 | 9.895 2819 | 434   | 0.104 7181 | 9.895 5918 | 165 | 30 |    |
|    | 40 | 9.790 9005 | 268 | 9.895 3253 | 433   | 0.104 6747 | 9.895 5753 | 164 | 20 |    |
|    | 50 | 9.790 9273 | 268 | 9.895 3686 | 433   | 0.104 6314 | 9.895 5587 | 165 | 10 |    |
| 10 | 0  | 9.790 9541 | 268 | 9.895 4119 | 433   | 0.104 5881 | 9.895 5422 | 164 | 0  | 50 |
|    |    | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d.  |    |    |



|    | "  | sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d.  | "  |    |
|----|----|------------|-----|------------|-------|------------|------------|-----|----|----|
| 10 | o  | 9.790 9541 | 268 | 9.895 4119 | 434   | 0.104 5881 | 9.895 5422 | 166 | o  | 50 |
|    | 10 | 9.790 9809 | 268 | 9.895 4553 | 433   | 0.104 5447 | 9.895 5256 | 165 | 50 |    |
|    | 20 | 9.791 0077 | 268 | 9.895 4986 | 433   | 0.104 5014 | 9.895 5091 | 166 | 40 |    |
|    | 30 | 9.791 0345 | 267 | 9.895 5419 | 434   | 0.104 4581 | 9.895 4925 | 165 | 30 |    |
|    | 40 | 9.791 0612 | 267 | 9.895 5853 | 433   | 0.104 4147 | 9.895 4760 | 166 | 20 |    |
|    | 50 | 9.791 0880 | 268 | 9.895 6286 | 433   | 0.104 3714 | 9.895 4594 | 165 | 10 |    |
| 11 | o  | 9.791 1148 | 268 | 9.895 6719 | 434   | 0.104 3281 | 9.895 4429 | 166 | o  | 49 |
|    | 10 | 9.791 1416 | 267 | 9.895 7153 | 433   | 0.104 2847 | 9.895 4263 | 166 | 50 |    |
|    | 20 | 9.791 1683 | 268 | 9.895 7586 | 433   | 0.104 2414 | 9.895 4097 | 165 | 40 |    |
|    | 30 | 9.791 1951 | 268 | 9.895 8019 | 434   | 0.104 1981 | 9.895 3932 | 166 | 30 |    |
|    | 40 | 9.791 2219 | 267 | 9.895 8453 | 433   | 0.104 1547 | 9.895 3766 | 166 | 20 |    |
|    | 50 | 9.791 2486 | 268 | 9.895 8886 | 433   | 0.104 1114 | 9.895 3600 | 165 | 10 |    |
| 12 | o  | 9.791 2754 | 267 | 9.895 9319 | 433   | 0.104 0681 | 9.895 3435 | 166 | o  | 48 |
|    | 10 | 9.791 3021 | 268 | 9.895 9752 | 434   | 0.104 0248 | 9.895 3269 | 166 | 50 |    |
|    | 20 | 9.791 3289 | 267 | 9.896 0186 | 433   | 0.103 9814 | 9.895 3103 | 165 | 40 |    |
|    | 30 | 9.791 3556 | 268 | 9.896 0619 | 433   | 0.103 9381 | 9.895 2938 | 166 | 30 |    |
|    | 40 | 9.791 3824 | 267 | 9.896 1052 | 433   | 0.103 8948 | 9.895 2772 | 166 | 20 |    |
|    | 50 | 9.791 4091 | 268 | 9.896 1485 | 433   | 0.103 8515 | 9.895 2606 | 166 | 10 |    |
| 13 | o  | 9.791 4359 | 267 | 9.896 1918 | 434   | 0.103 8082 | 9.895 2440 | 166 | o  | 47 |
|    | 10 | 9.791 4626 | 267 | 9.896 2352 | 433   | 0.103 7648 | 9.895 2274 | 165 | 50 |    |
|    | 20 | 9.791 4893 | 268 | 9.896 2785 | 433   | 0.103 7215 | 9.895 2109 | 166 | 40 |    |
|    | 30 | 9.791 5161 | 267 | 9.896 3218 | 433   | 0.103 6782 | 9.895 1943 | 166 | 30 |    |
|    | 40 | 9.791 5428 | 267 | 9.896 3651 | 433   | 0.103 6349 | 9.895 1777 | 166 | 20 |    |
|    | 50 | 9.791 5695 | 268 | 9.896 4084 | 433   | 0.103 5916 | 9.895 1611 | 166 | 10 |    |
| 14 | o  | 9.791 5963 | 267 | 9.896 4517 | 434   | 0.103 5483 | 9.895 1445 | 166 | o  | 46 |
|    | 10 | 9.791 6230 | 267 | 9.896 4951 | 433   | 0.103 5049 | 9.895 1279 | 166 | 50 |    |
|    | 20 | 9.791 6497 | 267 | 9.896 5384 | 433   | 0.103 4616 | 9.895 1113 | 166 | 40 |    |
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|    | 40 | 9.791 7031 | 267 | 9.896 6250 | 433   | 0.103 3750 | 9.895 0782 | 166 | 20 |    |
|    | 50 | 9.791 7298 | 268 | 9.896 6683 | 433   | 0.103 3317 | 9.895 0616 | 166 | 10 |    |
| 15 | o  | 9.791 7566 | 267 | 9.896 7116 | 433   | 0.103 2884 | 9.895 0450 | 166 | o  | 45 |
|    | 10 | 9.791 7833 | 267 | 9.896 7549 | 433   | 0.103 2451 | 9.895 0284 | 166 | 50 |    |
|    | 20 | 9.791 8100 | 267 | 9.896 7982 | 433   | 0.103 2018 | 9.895 0118 | 166 | 40 |    |
|    | 30 | 9.791 8367 | 267 | 9.896 8415 | 433   | 0.103 1585 | 9.894 9952 | 166 | 30 |    |
|    | 40 | 9.791 8634 | 267 | 9.896 8848 | 433   | 0.103 1152 | 9.894 9786 | 167 | 20 |    |
|    | 50 | 9.791 8901 | 267 | 9.896 9281 | 433   | 0.103 0719 | 9.894 9619 | 166 | 10 |    |
| 16 | o  | 9.791 9168 | 267 | 9.896 9714 | 433   | 0.103 0286 | 9.894 9453 | 166 | o  | 44 |
|    | 10 | 9.791 9435 | 266 | 9.897 0147 | 433   | 0.102 9853 | 9.894 9287 | 166 | 50 |    |
|    | 20 | 9.791 9701 | 267 | 9.897 0580 | 433   | 0.102 9420 | 9.894 9121 | 166 | 40 |    |
|    | 30 | 9.791 9968 | 267 | 9.897 1013 | 433   | 0.102 8987 | 9.894 8955 | 166 | 30 |    |
|    | 40 | 9.792 0235 | 267 | 9.897 1446 | 433   | 0.102 8554 | 9.894 8789 | 166 | 20 |    |
|    | 50 | 9.792 0502 | 267 | 9.897 1879 | 433   | 0.102 8121 | 9.894 8623 | 166 | 10 |    |
| 17 | o  | 9.792 0769 | 266 | 9.897 2312 | 433   | 0.102 7688 | 9.894 8457 | 167 | o  | 43 |
|    | 10 | 9.792 1035 | 267 | 9.897 2745 | 433   | 0.102 7255 | 9.894 8290 | 166 | 50 |    |
|    | 20 | 9.792 1302 | 267 | 9.897 3178 | 433   | 0.102 6822 | 9.894 8124 | 166 | 40 |    |
|    | 30 | 9.792 1569 | 267 | 9.897 3611 | 433   | 0.102 6389 | 9.894 7958 | 166 | 30 |    |
|    | 40 | 9.792 1836 | 267 | 9.897 4044 | 433   | 0.102 5956 | 9.894 7792 | 167 | 20 |    |
|    | 50 | 9.792 2102 | 267 | 9.897 4477 | 433   | 0.102 5523 | 9.894 7625 | 166 | 10 |    |
| 18 | o  | 9.792 2369 | 266 | 9.897 4910 | 432   | 0.102 5090 | 9.894 7459 | 166 | o  | 42 |
|    | 10 | 9.792 2635 | 267 | 9.897 5342 | 433   | 0.102 4658 | 9.894 7293 | 166 | 50 |    |
|    | 20 | 9.792 2902 | 266 | 9.897 5775 | 433   | 0.102 4225 | 9.894 7127 | 167 | 40 |    |
|    | 30 | 9.792 3168 | 267 | 9.897 6208 | 433   | 0.102 3792 | 9.894 6960 | 166 | 30 |    |
|    | 40 | 9.792 3435 | 266 | 9.897 6641 | 433   | 0.102 3359 | 9.894 6794 | 166 | 20 |    |
|    | 50 | 9.792 3701 | 267 | 9.897 7074 | 433   | 0.102 2926 | 9.894 6628 | 167 | 10 |    |
| 19 | o  | 9.792 3968 | 266 | 9.897 7507 | 433   | 0.102 2493 | 9.894 6461 | 166 | o  | 41 |
|    | 10 | 9.792 4234 | 267 | 9.897 7940 | 432   | 0.102 2060 | 9.894 6295 | 167 | 50 |    |
|    | 20 | 9.792 4501 | 266 | 9.897 8372 | 433   | 0.102 1628 | 9.894 6128 | 166 | 40 |    |
|    | 30 | 9.792 4767 | 267 | 9.897 8805 | 433   | 0.102 1195 | 9.894 5962 | 166 | 30 |    |
|    | 40 | 9.792 5034 | 266 | 9.897 9238 | 433   | 0.102 0762 | 9.894 5796 | 167 | 20 |    |
|    | 50 | 9.792 5300 | 266 | 9.897 9671 | 433   | 0.102 0329 | 9.894 5629 | 166 | 10 |    |
| 20 | o  | 9.792 5566 | 266 | 9.898 0104 | 433   | 0.101 9896 | 9.894 5463 | 166 | o  | 40 |

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|         | "  | Sin          | d.  | Tang       | d. c. | Cotg       | Cos        | d.  | "  |    |
|---------|----|--------------|-----|------------|-------|------------|------------|-----|----|----|
| 488     | 20 | 0 9.792 5566 | 266 | 9.898 0104 | 432   | 0.101 9896 | 9.894 5463 | 167 | 0  | 40 |
| 1 43.3  | 10 | 9.792 5832   | 267 | 9.898 0536 | 433   | 0.101 9464 | 9.894 5296 | 166 | 50 |    |
| 2 85.6  | 20 | 9.792 6099   | 266 | 9.898 0969 | 433   | 0.101 9031 | 9.894 5130 | 167 | 40 |    |
| 3 129.9 | 30 | 9.792 6365   | 266 | 9.898 1402 | 433   | 0.101 8598 | 9.894 4963 | 166 | 30 |    |
| 4 173.2 | 40 | 9.792 6631   | 266 | 9.898 1835 | 433   | 0.101 8165 | 9.894 4797 | 167 | 20 |    |
| 5 216.5 | 50 | 9.792 6897   | 266 | 9.898 2267 | 433   | 0.101 7733 | 9.894 4630 | 167 | 10 |    |
| 6 259.8 | 21 | 0 9.792 7163 | 266 | 9.898 2700 | 433   | 0.101 7300 | 9.894 4463 | 166 | 0  | 39 |
| 7 303.1 | 10 | 9.792 7429   | 267 | 9.898 3133 | 432   | 0.101 6867 | 9.894 4297 | 167 | 50 |    |
| 8 346.4 | 20 | 9.792 7696   | 266 | 9.898 3565 | 433   | 0.101 6435 | 9.894 4130 | 166 | 40 |    |
| 9 389.7 | 30 | 9.792 7962   | 266 | 9.898 3998 | 433   | 0.101 6002 | 9.894 3964 | 167 | 30 |    |
|         | 40 | 9.792 8228   | 266 | 9.898 4431 | 433   | 0.101 5569 | 9.894 3797 | 167 | 20 |    |
|         | 50 | 9.792 8494   | 266 | 9.898 4863 | 433   | 0.101 5137 | 9.894 3630 | 166 | 10 |    |
| 267     | 22 | 0 9.792 8760 | 266 | 9.898 5296 | 433   | 0.101 4704 | 9.894 3464 | 167 | 0  | 38 |
| 1 26.7  | 10 | 9.792 9026   | 266 | 9.898 5729 | 432   | 0.101 4271 | 9.894 3297 | 167 | 50 |    |
| 2 53.4  | 20 | 9.792 9292   | 265 | 9.898 6161 | 433   | 0.101 3839 | 9.894 3130 | 167 | 40 |    |
| 3 80.1  | 30 | 9.792 9557   | 265 | 9.898 6594 | 433   | 0.101 3406 | 9.894 2963 | 166 | 30 |    |
| 4 106.8 | 40 | 9.792 9823   | 266 | 9.898 7027 | 432   | 0.101 2973 | 9.894 2797 | 167 | 20 |    |
| 5 133.5 | 50 | 9.793 0089   | 266 | 9.898 7459 | 433   | 0.101 2541 | 9.894 2630 | 167 | 10 |    |
| 6 160.2 | 23 | 0 9.793 0355 | 266 | 9.898 7892 | 432   | 0.101 2108 | 9.894 2463 | 167 | 0  | 37 |
| 7 186.9 | 10 | 9.793 0621   | 266 | 9.898 8324 | 433   | 0.101 1676 | 9.894 2296 | 166 | 50 |    |
| 8 213.6 | 20 | 9.793 0887   | 265 | 9.898 8757 | 433   | 0.101 1243 | 9.894 2130 | 167 | 40 |    |
| 9 240.3 | 30 | 9.793 1152   | 265 | 9.898 9190 | 432   | 0.101 0810 | 9.894 1963 | 167 | 30 |    |
|         | 40 | 9.793 1418   | 266 | 9.898 9622 | 432   | 0.101 0378 | 9.894 1796 | 167 | 20 |    |
| 266     | 50 | 9.793 1684   | 265 | 9.899 0055 | 432   | 0.100 9945 | 9.894 1629 | 167 | 10 |    |
| 1 26.6  | 24 | 0 9.793 1949 | 266 | 9.899 0487 | 433   | 0.100 9513 | 9.894 1462 | 167 | 0  | 36 |
| 2 53.2  | 10 | 9.793 2215   | 266 | 9.899 0920 | 432   | 0.100 9080 | 9.894 1295 | 167 | 50 |    |
| 3 79.8  | 20 | 9.793 2481   | 265 | 9.899 1352 | 432   | 0.100 8648 | 9.894 1128 | 167 | 40 |    |
| 4 106.4 | 30 | 9.793 2746   | 266 | 9.899 1785 | 432   | 0.100 8215 | 9.894 0961 | 166 | 30 |    |
| 5 133.0 | 40 | 9.793 3012   | 265 | 9.899 2217 | 433   | 0.100 7783 | 9.894 0795 | 167 | 20 |    |
| 6 159.6 | 50 | 9.793 3277   | 266 | 9.899 2650 | 432   | 0.100 7350 | 9.894 0628 | 167 | 10 |    |
| 7 186.2 | 25 | 0 9.793 3543 | 265 | 9.899 3082 | 433   | 0.100 6918 | 9.894 0461 | 167 | 0  | 35 |
| 8 212.8 | 10 | 9.793 3808   | 266 | 9.899 3515 | 432   | 0.100 6485 | 9.894 0294 | 167 | 50 |    |
| 9 239.4 | 20 | 9.793 4074   | 265 | 9.899 3947 | 433   | 0.100 6053 | 9.894 0127 | 167 | 40 |    |
|         | 30 | 9.793 4339   | 266 | 9.899 4380 | 432   | 0.100 5620 | 9.893 9960 | 167 | 30 |    |
| 265     | 40 | 9.793 4605   | 265 | 9.899 4812 | 432   | 0.100 5188 | 9.893 9793 | 167 | 20 |    |
| 1 26.5  | 50 | 9.793 4870   | 265 | 9.899 5244 | 433   | 0.100 4756 | 9.893 9626 | 168 | 10 |    |
| 2 53.0  | 26 | 0 9.793 5135 | 266 | 9.899 5677 | 432   | 0.100 4323 | 9.893 9458 | 167 | 0  | 34 |
| 3 79.5  | 10 | 9.793 5401   | 265 | 9.899 6109 | 433   | 0.100 3891 | 9.893 9291 | 167 | 50 |    |
| 4 106.0 | 20 | 9.793 5666   | 265 | 9.899 6542 | 432   | 0.100 3458 | 9.893 9124 | 167 | 40 |    |
| 5 132.5 | 30 | 9.793 5931   | 265 | 9.899 6974 | 432   | 0.100 3026 | 9.893 8957 | 167 | 30 |    |
| 6 159.0 | 40 | 9.793 6196   | 266 | 9.899 7406 | 433   | 0.100 2594 | 9.893 8790 | 167 | 20 |    |
| 7 185.5 | 50 | 9.793 6462   | 265 | 9.899 7839 | 432   | 0.100 2161 | 9.893 8623 | 167 | 10 |    |
| 8 212.0 | 27 | 0 9.793 6727 | 265 | 9.899 8271 | 432   | 0.100 1729 | 9.893 8456 | 168 | 0  | 33 |
| 9 238.5 | 10 | 9.793 6992   | 265 | 9.899 8703 | 433   | 0.100 1297 | 9.893 8288 | 167 | 50 |    |
|         | 20 | 9.793 7257   | 265 | 9.899 9136 | 432   | 0.100 0864 | 9.893 8121 | 167 | 40 |    |
| 166     | 30 | 9.793 7522   | 265 | 9.899 9568 | 432   | 0.100 0432 | 9.893 7954 | 167 | 30 |    |
| 1 16.6  | 40 | 9.793 7787   | 265 | 9.900 0000 | 433   | 0.100 0000 | 9.893 7787 | 167 | 20 |    |
| 2 33.2  | 50 | 9.793 8052   | 265 | 9.900 0433 | 432   | 0.099 9567 | 9.893 7620 | 168 | 10 |    |
| 3 49.8  | 28 | 0 9.793 8317 | 265 | 9.900 0865 | 432   | 0.099 9135 | 9.893 7452 | 167 | 0  | 32 |
| 4 66.4  | 10 | 9.793 8582   | 265 | 9.900 1297 | 433   | 0.099 8703 | 9.893 7285 | 167 | 50 |    |
| 5 83.0  | 20 | 9.793 8847   | 265 | 9.900 1730 | 432   | 0.099 8270 | 9.893 7118 | 168 | 40 |    |
| 6 99.6  | 30 | 9.793 9112   | 265 | 9.900 2162 | 432   | 0.099 7838 | 9.893 6950 | 167 | 30 |    |
| 7 116.2 | 40 | 9.793 9377   | 265 | 9.900 2594 | 432   | 0.099 7406 | 9.893 6783 | 167 | 20 |    |
| 8 132.8 | 50 | 9.793 9642   | 265 | 9.900 3026 | 433   | 0.099 6974 | 9.893 6616 | 168 | 10 |    |
| 9 149.4 | 29 | 0 9.793 9907 | 265 | 9.900 3459 | 432   | 0.099 6541 | 9.893 6448 | 167 | 0  | 31 |
|         | 10 | 9.794 0172   | 265 | 9.900 3891 | 432   | 0.099 6109 | 9.893 6281 | 168 | 50 |    |
| 167     | 20 | 9.794 0437   | 264 | 9.900 4323 | 432   | 0.099 5677 | 9.893 6113 | 167 | 40 |    |
| 1 16.7  | 30 | 9.794 0701   | 265 | 9.900 4755 | 433   | 0.099 5245 | 9.893 5946 | 167 | 30 |    |
| 2 33.4  | 40 | 9.794 0966   | 265 | 9.900 5188 | 432   | 0.099 4812 | 9.893 5779 | 168 | 20 |    |
| 3 50.1  | 50 | 9.794 1231   | 265 | 9.900 5620 | 432   | 0.099 4380 | 9.893 5611 | 167 | 10 |    |
| 4 66.8  | 30 | 9.794 1496   | 265 | 9.900 6052 | 432   | 0.099 3948 | 9.893 5444 | 167 | 0  | 30 |
| 5 83.5  |    |              |     |            |       |            |            |     |    |    |
| 6 100.2 |    |              |     |            |       |            |            |     |    |    |
| 7 116.9 |    |              |     |            |       |            |            |     |    |    |
| 8 133.6 |    |              |     |            |       |            |            |     |    |    |
| 9 150.3 |    |              |     |            |       |            |            |     |    |    |
|         | "  | Cos          | d.  | Cotg       | d. c. | Tang       | Sin        | d.  | "  |    |



|    | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d.  | "  |    |
|----|----|------------|-----|------------|-------|------------|------------|-----|----|----|
| 30 | 0  | 9.794 1496 | 264 | 9.900 6052 | 432   | 0.099 3948 | 9.893 5444 | 168 | 0  | 30 |
|    | 10 | 9.794 1760 | 265 | 9.900 6484 | 432   | 0.099 3516 | 9.893 5276 | 167 | 50 |    |
|    | 20 | 9.794 2025 | 265 | 9.900 6916 | 432   | 0.099 3084 | 9.893 5109 | 168 | 40 |    |
|    | 30 | 9.794 2290 | 265 | 9.900 7348 | 432   | 0.099 2652 | 9.893 4941 | 167 | 30 |    |
|    | 40 | 9.794 2554 | 264 | 9.900 7781 | 433   | 0.099 2219 | 9.893 4774 | 168 | 20 |    |
|    | 50 | 9.794 2819 | 265 | 9.900 8213 | 432   | 0.099 1787 | 9.893 4606 | 167 | 10 |    |
| 31 | 0  | 9.794 3083 | 264 | 9.900 8645 | 432   | 0.099 1355 | 9.893 4439 | 168 | 0  | 29 |
|    | 10 | 9.794 3348 | 264 | 9.900 9077 | 432   | 0.099 0923 | 9.893 4271 | 168 | 50 |    |
|    | 20 | 9.794 3612 | 265 | 9.900 9509 | 432   | 0.099 0491 | 9.893 4103 | 167 | 40 |    |
|    | 30 | 9.794 3877 | 264 | 9.900 9941 | 432   | 0.099 0059 | 9.893 3936 | 168 | 30 |    |
|    | 40 | 9.794 4141 | 265 | 9.901 0373 | 432   | 0.098 9627 | 9.893 3768 | 168 | 20 |    |
|    | 50 | 9.794 4406 | 264 | 9.901 0805 | 432   | 0.098 9195 | 9.893 3600 | 167 | 10 |    |
| 32 | 0  | 9.794 4670 | 265 | 9.901 1237 | 433   | 0.098 8763 | 9.893 3433 | 168 | 0  | 28 |
|    | 10 | 9.794 4935 | 264 | 9.901 1670 | 432   | 0.098 8330 | 9.893 3265 | 168 | 50 |    |
|    | 20 | 9.794 5199 | 264 | 9.901 2102 | 432   | 0.098 7898 | 9.893 3097 | 167 | 40 |    |
|    | 30 | 9.794 5463 | 265 | 9.901 2534 | 432   | 0.098 7466 | 9.893 2930 | 168 | 30 |    |
|    | 40 | 9.794 5728 | 264 | 9.901 2966 | 432   | 0.098 7034 | 9.893 2762 | 168 | 20 |    |
|    | 50 | 9.794 5992 | 264 | 9.901 3398 | 432   | 0.098 6602 | 9.893 2594 | 168 | 10 |    |
| 33 | 0  | 9.794 6256 | 264 | 9.901 3830 | 432   | 0.098 6170 | 9.893 2426 | 167 | 0  | 27 |
|    | 10 | 9.794 6520 | 264 | 9.901 4262 | 432   | 0.098 5738 | 9.893 2259 | 168 | 50 |    |
|    | 20 | 9.794 6784 | 265 | 9.901 4694 | 432   | 0.098 5306 | 9.893 2091 | 168 | 40 |    |
|    | 30 | 9.794 7049 | 264 | 9.901 5126 | 432   | 0.098 4874 | 9.893 1923 | 168 | 30 |    |
|    | 40 | 9.794 7313 | 264 | 9.901 5558 | 432   | 0.098 4442 | 9.893 1755 | 168 | 20 |    |
|    | 50 | 9.794 7577 | 264 | 9.901 5990 | 432   | 0.098 4010 | 9.893 1587 | 168 | 10 |    |
| 34 | 0  | 9.794 7841 | 264 | 9.901 6422 | 431   | 0.098 3578 | 9.893 1419 | 168 | 0  | 26 |
|    | 10 | 9.794 8105 | 264 | 9.901 6853 | 432   | 0.098 3147 | 9.893 1251 | 167 | 50 |    |
|    | 20 | 9.794 8369 | 264 | 9.901 7285 | 432   | 0.098 2715 | 9.893 1084 | 168 | 40 |    |
|    | 30 | 9.794 8633 | 264 | 9.901 7717 | 432   | 0.098 2283 | 9.893 0916 | 168 | 30 |    |
|    | 40 | 9.794 8897 | 264 | 9.901 8149 | 432   | 0.098 1851 | 9.893 0748 | 168 | 20 |    |
|    | 50 | 9.794 9161 | 264 | 9.901 8581 | 432   | 0.098 1419 | 9.893 0580 | 168 | 10 |    |
| 35 | 0  | 9.794 9425 | 264 | 9.901 9013 | 432   | 0.098 0987 | 9.893 0412 | 168 | 0  | 25 |
|    | 10 | 9.794 9689 | 264 | 9.901 9445 | 432   | 0.098 0555 | 9.893 0244 | 168 | 50 |    |
|    | 20 | 9.794 9953 | 263 | 9.901 9877 | 432   | 0.098 0123 | 9.893 0076 | 168 | 40 |    |
|    | 30 | 9.795 0216 | 264 | 9.902 0309 | 432   | 0.097 9691 | 9.892 9908 | 168 | 30 |    |
|    | 40 | 9.795 0480 | 264 | 9.902 0741 | 431   | 0.097 9259 | 9.892 9740 | 168 | 20 |    |
|    | 50 | 9.795 0744 | 264 | 9.902 1172 | 432   | 0.097 8828 | 9.892 9572 | 168 | 10 |    |
| 36 | 0  | 9.795 1008 | 264 | 9.902 1604 | 432   | 0.097 8396 | 9.892 9404 | 168 | 0  | 24 |
|    | 10 | 9.795 1272 | 263 | 9.902 2036 | 432   | 0.097 7964 | 9.892 9236 | 169 | 50 |    |
|    | 20 | 9.795 1535 | 264 | 9.902 2468 | 432   | 0.097 7532 | 9.892 9068 | 168 | 40 |    |
|    | 30 | 9.795 1799 | 264 | 9.902 2900 | 432   | 0.097 7100 | 9.892 8900 | 168 | 30 |    |
|    | 40 | 9.795 2063 | 263 | 9.902 3332 | 431   | 0.097 6668 | 9.892 8731 | 168 | 20 |    |
|    | 50 | 9.795 2326 | 264 | 9.902 3763 | 432   | 0.097 6237 | 9.892 8563 | 168 | 10 |    |
| 37 | 0  | 9.795 2590 | 263 | 9.902 4195 | 432   | 0.097 5805 | 9.892 8395 | 168 | 0  | 23 |
|    | 10 | 9.795 2853 | 264 | 9.902 4627 | 432   | 0.097 5373 | 9.892 8227 | 169 | 50 |    |
|    | 20 | 9.795 3117 | 264 | 9.902 5059 | 431   | 0.097 4941 | 9.892 8058 | 168 | 40 |    |
|    | 30 | 9.795 3381 | 263 | 9.902 5490 | 432   | 0.097 4510 | 9.892 7890 | 168 | 30 |    |
|    | 40 | 9.795 3644 | 264 | 9.902 5922 | 432   | 0.097 4078 | 9.892 7722 | 168 | 20 |    |
|    | 50 | 9.795 3908 | 263 | 9.902 6354 | 432   | 0.097 3646 | 9.892 7554 | 169 | 10 |    |
| 38 | 0  | 9.795 4171 | 263 | 9.902 6786 | 431   | 0.097 3214 | 9.892 7385 | 168 | 0  | 22 |
|    | 10 | 9.795 4434 | 264 | 9.902 7217 | 432   | 0.097 2783 | 9.892 7217 | 168 | 50 |    |
|    | 20 | 9.795 4698 | 263 | 9.902 7649 | 432   | 0.097 2351 | 9.892 7049 | 169 | 40 |    |
|    | 30 | 9.795 4961 | 264 | 9.902 8081 | 431   | 0.097 1919 | 9.892 6880 | 168 | 30 |    |
|    | 40 | 9.795 5225 | 263 | 9.902 8512 | 432   | 0.097 1488 | 9.892 6712 | 168 | 20 |    |
|    | 50 | 9.795 5488 | 263 | 9.902 8944 | 432   | 0.097 1056 | 9.892 6544 | 169 | 10 |    |
| 39 | 0  | 9.795 5751 | 263 | 9.902 9376 | 431   | 0.097 0624 | 9.892 6375 | 168 | 0  | 21 |
|    | 10 | 9.795 6014 | 264 | 9.902 9807 | 432   | 0.097 0193 | 9.892 6207 | 168 | 50 |    |
|    | 20 | 9.795 6278 | 263 | 9.903 0239 | 432   | 0.096 9761 | 9.892 6039 | 169 | 40 |    |
|    | 30 | 9.795 6541 | 263 | 9.903 0671 | 431   | 0.096 9329 | 9.892 5870 | 168 | 30 |    |
|    | 40 | 9.795 6804 | 263 | 9.903 1102 | 432   | 0.096 8898 | 9.892 5702 | 169 | 20 |    |
|    | 50 | 9.795 7067 | 263 | 9.903 1534 | 432   | 0.096 8466 | 9.892 5533 | 168 | 10 |    |
| 40 | 0  | 9.795 7330 | 263 | 9.903 1966 | 432   | 0.096 8034 | 9.892 5365 | 168 | 0  | 20 |
|    | "  | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d.  | "  |    |

432  
1 43.2  
2 86.4  
3 129.6  
4 172.8  
5 216.0  
6 259.2  
7 302.4  
8 345.6  
9 388.8

481  
1 43.1  
2 86.2  
3 129.3  
4 172.4  
5 215.5  
6 258.6  
7 301.7  
8 344.8  
9 387.9

264  
1 26.4  
2 52.8  
3 79.2  
4 105.6  
5 132.0  
6 158.4  
7 184.8  
8 211.2  
9 237.6

283  
1 26.3  
2 52.6  
3 78.9  
4 105.2  
5 131.5  
6 157.8  
7 184.1  
8 210.4  
9 236.7

168  
1 16.8  
2 33.6  
3 50.4  
4 67.2  
5 84.0  
6 100.8  
7 117.6  
8 134.4  
9 151.2

169  
1 16.9  
2 33.8  
3 50.7  
4 67.6  
5 84.5  
6 101.4  
7 118.3  
8 135.2  
9 152.1



|          | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d.  | "  |    |
|----------|----|------------|-----|------------|-------|------------|------------|-----|----|----|
| 432      | 40 | 0.795 7330 | 263 | 9.903 1966 | 431   | 0.096 8034 | 9.892 5365 | 169 | 0  | 2  |
| 1 43.2   | 10 | 9.795 7593 | 264 | 9.903 2397 | 432   | 0.096 7603 | 9.892 5196 | 168 | 50 |    |
| 2 86.4   | 20 | 9.795 7857 | 263 | 9.903 2829 | 431   | 0.096 7171 | 9.892 5028 | 169 | 40 |    |
| 3 129.6  | 30 | 9.795 8120 | 263 | 9.903 3260 | 432   | 0.096 6740 | 9.892 4859 | 168 | 30 |    |
| 4 172.8  | 40 | 9.795 8383 | 263 | 9.903 3692 | 431   | 0.096 6308 | 9.892 4691 | 169 | 20 |    |
| 5 216.0  | 50 | 9.795 8646 | 263 | 9.903 4123 | 432   | 0.096 5877 | 9.892 4522 | 168 | 10 |    |
| 6 259.2  | 0  | 9.795 8909 | 263 | 9.903 4555 | 431   | 0.096 5445 | 9.892 4354 | 169 | 0  | 1  |
| 7 302.4  | 10 | 9.795 9172 | 263 | 9.903 4987 | 432   | 0.096 5013 | 9.892 4185 | 169 | 50 |    |
| 8 345.6  | 20 | 9.795 9435 | 262 | 9.903 5418 | 431   | 0.096 4582 | 9.892 4016 | 168 | 40 |    |
| 9 388.8  | 30 | 9.795 9697 | 263 | 9.903 5850 | 432   | 0.096 4150 | 9.892 3848 | 169 | 30 |    |
|          | 40 | 9.795 9960 | 263 | 9.903 6281 | 431   | 0.096 3719 | 9.892 3679 | 169 | 20 |    |
|          | 50 | 9.796 0223 | 263 | 9.903 6713 | 432   | 0.096 3287 | 9.892 3510 | 168 | 10 |    |
| 264      | 42 | 0.796 0486 | 263 | 9.903 7144 | 431   | 0.096 2856 | 9.892 3342 | 169 | 0  | 18 |
| 1 26.4   | 10 | 9.796 0749 | 263 | 9.903 7576 | 432   | 0.096 2424 | 9.892 3173 | 169 | 50 |    |
| 2 52.8   | 20 | 9.796 1012 | 262 | 9.903 8007 | 431   | 0.096 1993 | 9.892 3004 | 168 | 40 |    |
| 3 79.2   | 30 | 9.796 1274 | 263 | 9.903 8439 | 432   | 0.096 1561 | 9.892 2836 | 169 | 30 |    |
| 4 105.6  | 40 | 9.796 1537 | 263 | 9.903 8870 | 431   | 0.096 1130 | 9.892 2667 | 169 | 20 |    |
| 5 132.0  | 50 | 9.796 1800 | 262 | 9.903 9302 | 432   | 0.096 0698 | 9.892 2498 | 169 | 10 |    |
| 6 158.4  | 0  | 9.796 2062 | 262 | 9.903 9733 | 431   | 0.096 0267 | 9.892 2329 | 168 | 0  | 17 |
| 7 184.8  | 10 | 9.796 2325 | 263 | 9.904 0164 | 432   | 0.095 9836 | 9.892 2161 | 169 | 50 |    |
| 8 211.2  | 20 | 9.796 2588 | 262 | 9.904 0596 | 431   | 0.095 9404 | 9.892 1992 | 169 | 40 |    |
| 9 237.6  | 30 | 9.796 2850 | 263 | 9.904 1027 | 432   | 0.095 8973 | 9.892 1823 | 169 | 30 |    |
|          | 40 | 9.796 3113 | 263 | 9.904 1459 | 431   | 0.095 8541 | 9.892 1654 | 169 | 20 |    |
| 203      | 50 | 9.796 3375 | 263 | 9.904 1890 | 432   | 0.095 8110 | 9.892 1485 | 169 | 10 |    |
| 1 26.3   | 0  | 9.796 3638 | 262 | 9.904 2321 | 431   | 0.095 7679 | 9.892 1316 | 168 | 0  | 16 |
| 2 52.6   | 10 | 9.796 3900 | 263 | 9.904 2753 | 432   | 0.095 7247 | 9.892 1148 | 169 | 50 |    |
| 3 78.9   | 20 | 9.796 4163 | 262 | 9.904 3184 | 431   | 0.095 6816 | 9.892 0979 | 169 | 40 |    |
| 4 105.2  | 30 | 9.796 4425 | 263 | 9.904 3616 | 432   | 0.095 6384 | 9.892 0810 | 169 | 30 |    |
| 5 131.5  | 40 | 9.796 4688 | 263 | 9.904 4047 | 431   | 0.095 5953 | 9.892 0641 | 169 | 20 |    |
| 6 157.8  | 50 | 9.796 4950 | 262 | 9.904 4478 | 432   | 0.095 5522 | 9.892 0472 | 169 | 10 |    |
| 7 184.1  | 0  | 9.796 5212 | 263 | 9.904 4910 | 431   | 0.095 5090 | 9.892 0303 | 169 | 0  | 15 |
| 8 210.4  | 10 | 9.796 5475 | 262 | 9.904 5341 | 432   | 0.095 4659 | 9.892 0134 | 169 | 50 |    |
| 9 236.7  | 20 | 9.796 5737 | 262 | 9.904 5772 | 431   | 0.095 4228 | 9.891 9965 | 169 | 40 |    |
|          | 30 | 9.796 5999 | 263 | 9.904 6204 | 432   | 0.095 3796 | 9.891 9796 | 169 | 30 |    |
| 262      | 40 | 9.796 6262 | 262 | 9.904 6635 | 431   | 0.095 3365 | 9.891 9627 | 169 | 20 |    |
| 1 26.2   | 50 | 9.796 6524 | 262 | 9.904 7066 | 432   | 0.095 2934 | 9.891 9458 | 169 | 10 |    |
| 2 52.5   | 0  | 9.796 6786 | 262 | 9.904 7497 | 431   | 0.095 2503 | 9.891 9289 | 170 | 0  | 14 |
| 3 78.8   | 10 | 9.796 7048 | 262 | 9.904 7929 | 432   | 0.095 2071 | 9.891 9119 | 169 | 50 |    |
| 4 105.1  | 20 | 9.796 7310 | 262 | 9.904 8360 | 431   | 0.095 1640 | 9.891 8950 | 169 | 40 |    |
| 5 131.4  | 30 | 9.796 7572 | 262 | 9.904 8791 | 432   | 0.095 1209 | 9.891 8781 | 169 | 30 |    |
| 6 157.7  | 40 | 9.796 7834 | 263 | 9.904 9222 | 431   | 0.095 0778 | 9.891 8612 | 169 | 20 |    |
| 7 184.0  | 50 | 9.796 8097 | 262 | 9.904 9654 | 432   | 0.095 0346 | 9.891 8443 | 169 | 10 |    |
| 8 210.3  | 0  | 9.796 8359 | 262 | 9.905 0085 | 431   | 0.094 9915 | 9.891 8274 | 169 | 0  | 13 |
| 9 236.6  | 10 | 9.796 8621 | 262 | 9.905 0516 | 432   | 0.094 9484 | 9.891 8105 | 170 | 50 |    |
| 108      | 20 | 9.796 8883 | 262 | 9.905 0947 | 431   | 0.094 9053 | 9.891 7935 | 169 | 40 |    |
| 1 16.8   | 30 | 9.796 9145 | 262 | 9.905 1378 | 432   | 0.094 8622 | 9.891 7766 | 169 | 30 |    |
| 2 33.2   | 40 | 9.796 9407 | 261 | 9.905 1810 | 431   | 0.094 8190 | 9.891 7597 | 169 | 20 |    |
| 3 49.6   | 50 | 9.796 9668 | 262 | 9.905 2241 | 432   | 0.094 7759 | 9.891 7428 | 170 | 10 |    |
| 4 76.0   | 0  | 9.796 9930 | 262 | 9.905 2672 | 431   | 0.094 7328 | 9.891 7258 | 169 | 0  | 12 |
| 5 102.4  | 10 | 9.797 0192 | 262 | 9.905 3103 | 432   | 0.094 6897 | 9.891 7089 | 169 | 50 |    |
| 6 128.8  | 20 | 9.797 0454 | 262 | 9.905 3534 | 431   | 0.094 6466 | 9.891 6920 | 170 | 40 |    |
| 7 155.2  | 30 | 9.797 0716 | 262 | 9.905 3965 | 432   | 0.094 6035 | 9.891 6750 | 169 | 30 |    |
| 8 181.6  | 40 | 9.797 0978 | 261 | 9.905 4397 | 431   | 0.094 5603 | 9.891 6581 | 169 | 20 |    |
| 9 208.0  | 50 | 9.797 1239 | 262 | 9.905 4828 | 432   | 0.094 5172 | 9.891 6412 | 170 | 10 |    |
| 106      | 0  | 9.797 1501 | 262 | 9.905 5259 | 431   | 0.094 4741 | 9.891 6242 | 169 | 0  | 11 |
| 1 16.0   | 10 | 9.797 1763 | 261 | 9.905 5690 | 432   | 0.094 4310 | 9.891 6073 | 170 | 50 |    |
| 2 32.4   | 20 | 9.797 2024 | 262 | 9.905 6121 | 431   | 0.094 3879 | 9.891 5903 | 169 | 40 |    |
| 3 48.8   | 30 | 9.797 2286 | 262 | 9.905 6552 | 432   | 0.094 3448 | 9.891 5734 | 169 | 30 |    |
| 4 75.2   | 40 | 9.797 2548 | 261 | 9.905 6983 | 431   | 0.094 3017 | 9.891 5565 | 170 | 20 |    |
| 5 101.6  | 50 | 9.797 2809 | 262 | 9.905 7414 | 432   | 0.094 2586 | 9.891 5395 | 169 | 10 |    |
| 6 128.0  | 0  | 9.797 3071 | 262 | 9.905 7845 | 431   | 0.094 2155 | 9.891 5226 | 169 | 0  | 10 |
| 7 154.4  |    |            |     |            |       |            |            |     |    |    |
| 8 180.8  |    |            |     |            |       |            |            |     |    |    |
| 9 207.2  |    |            |     |            |       |            |            |     |    |    |
| 10 233.6 |    |            |     |            |       |            |            |     |    |    |
|          | "  | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d.  | "  | r  |



|    | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d.  | "  |    |
|----|----|------------|-----|------------|-------|------------|------------|-----|----|----|
| 50 | 0  | 9.797 3071 | 261 | 9.905 7845 | 431   | 0.094 2155 | 9.891 5226 | 170 | 0  | 10 |
|    | 10 | 9.797 3332 | 262 | 9.905 8276 | 431   | 0.094 1724 | 9.891 5056 | 169 | 50 |    |
|    | 20 | 9.797 3594 | 262 | 9.905 8707 | 431   | 0.094 1293 | 9.891 4887 | 170 | 40 |    |
|    | 30 | 9.797 3856 | 261 | 9.905 9138 | 431   | 0.094 0862 | 9.891 4717 | 169 | 30 |    |
|    | 40 | 9.797 4117 | 261 | 9.905 9569 | 431   | 0.094 0431 | 9.891 4548 | 170 | 20 |    |
|    | 50 | 9.797 4378 | 261 | 9.906 0000 | 431   | 0.094 0000 | 9.891 4378 | 170 | 10 |    |
| 51 | 0  | 9.797 4640 | 261 | 9.906 0431 | 431   | 0.093 9569 | 9.891 4208 | 169 | 0  | 9  |
|    | 10 | 9.797 4901 | 262 | 9.906 0862 | 431   | 0.093 9138 | 9.891 4039 | 170 | 50 |    |
|    | 20 | 9.797 5163 | 261 | 9.906 1293 | 431   | 0.093 8707 | 9.891 3869 | 169 | 40 |    |
|    | 30 | 9.797 5424 | 261 | 9.906 1724 | 431   | 0.093 8276 | 9.891 3700 | 170 | 30 |    |
|    | 40 | 9.797 5685 | 262 | 9.906 2155 | 431   | 0.093 7845 | 9.891 3530 | 170 | 20 |    |
|    | 50 | 9.797 5947 | 261 | 9.906 2586 | 431   | 0.093 7414 | 9.891 3360 | 169 | 10 |    |
| 52 | 0  | 9.797 6208 | 261 | 9.906 3017 | 431   | 0.093 6983 | 9.891 3191 | 170 | 0  | 8  |
|    | 10 | 9.797 6469 | 261 | 9.906 3448 | 431   | 0.093 6552 | 9.891 3021 | 170 | 50 |    |
|    | 20 | 9.797 6730 | 261 | 9.906 3879 | 431   | 0.093 6121 | 9.891 2851 | 170 | 40 |    |
|    | 30 | 9.797 6991 | 262 | 9.906 4310 | 431   | 0.093 5690 | 9.891 2681 | 169 | 30 |    |
|    | 40 | 9.797 7253 | 261 | 9.906 4741 | 431   | 0.093 5259 | 9.891 2512 | 170 | 20 |    |
|    | 50 | 9.797 7514 | 261 | 9.906 5172 | 431   | 0.093 4828 | 9.891 2342 | 170 | 10 |    |
| 53 | 0  | 9.797 7775 | 261 | 9.906 5603 | 431   | 0.093 4397 | 9.891 2172 | 170 | 0  | 7  |
|    | 10 | 9.797 8036 | 261 | 9.906 6034 | 430   | 0.093 3966 | 9.891 2002 | 169 | 50 |    |
|    | 20 | 9.797 8297 | 261 | 9.906 6464 | 431   | 0.093 3536 | 9.891 1833 | 170 | 40 |    |
|    | 30 | 9.797 8558 | 261 | 9.906 6895 | 431   | 0.093 3105 | 9.891 1663 | 170 | 30 |    |
|    | 40 | 9.797 8819 | 261 | 9.906 7326 | 431   | 0.093 2674 | 9.891 1493 | 170 | 20 |    |
|    | 50 | 9.797 9080 | 261 | 9.906 7757 | 431   | 0.093 2243 | 9.891 1323 | 170 | 10 |    |
| 54 | 0  | 9.797 9341 | 261 | 9.906 8188 | 431   | 0.093 1812 | 9.891 1153 | 170 | 0  | 6  |
|    | 10 | 9.797 9602 | 261 | 9.906 8619 | 431   | 0.093 1381 | 9.891 0983 | 170 | 50 |    |
|    | 20 | 9.797 9863 | 261 | 9.906 9050 | 430   | 0.093 0950 | 9.891 0813 | 170 | 40 |    |
|    | 30 | 9.798 0124 | 261 | 9.906 9480 | 431   | 0.093 0520 | 9.891 0643 | 170 | 30 |    |
|    | 40 | 9.798 0385 | 260 | 9.906 9911 | 431   | 0.093 0089 | 9.891 0473 | 170 | 20 |    |
|    | 50 | 9.798 0645 | 261 | 9.907 0342 | 431   | 0.092 9658 | 9.891 0303 | 170 | 10 |    |
| 55 | 0  | 9.798 0906 | 261 | 9.907 0773 | 431   | 0.092 9227 | 9.891 0133 | 170 | 0  | 5  |
|    | 10 | 9.798 1167 | 261 | 9.907 1204 | 430   | 0.092 8796 | 9.890 9963 | 170 | 50 |    |
|    | 20 | 9.798 1428 | 260 | 9.907 1634 | 431   | 0.092 8366 | 9.890 9793 | 170 | 40 |    |
|    | 30 | 9.798 1688 | 261 | 9.907 2065 | 431   | 0.092 7935 | 9.890 9623 | 170 | 30 |    |
|    | 40 | 9.798 1949 | 261 | 9.907 2496 | 431   | 0.092 7504 | 9.890 9453 | 170 | 20 |    |
|    | 50 | 9.798 2210 | 260 | 9.907 2927 | 430   | 0.092 7073 | 9.890 9283 | 170 | 10 |    |
| 56 | 0  | 9.798 2470 | 261 | 9.907 3357 | 431   | 0.092 6643 | 9.890 9113 | 170 | 0  | 4  |
|    | 10 | 9.798 2731 | 261 | 9.907 3788 | 431   | 0.092 6212 | 9.890 8943 | 170 | 50 |    |
|    | 20 | 9.798 2992 | 260 | 9.907 4219 | 430   | 0.092 5781 | 9.890 8773 | 170 | 40 |    |
|    | 30 | 9.798 3252 | 261 | 9.907 4649 | 431   | 0.092 5351 | 9.890 8603 | 170 | 30 |    |
|    | 40 | 9.798 3513 | 260 | 9.907 5080 | 431   | 0.092 4920 | 9.890 8433 | 171 | 20 |    |
|    | 50 | 9.798 3773 | 261 | 9.907 5511 | 430   | 0.092 4489 | 9.890 8262 | 170 | 10 |    |
| 57 | 0  | 9.798 4034 | 260 | 9.907 5941 | 431   | 0.092 4059 | 9.890 8092 | 170 | 0  | 3  |
|    | 10 | 9.798 4294 | 261 | 9.907 6372 | 431   | 0.092 3628 | 9.890 7922 | 170 | 50 |    |
|    | 20 | 9.798 4555 | 260 | 9.907 6803 | 430   | 0.092 3197 | 9.890 7752 | 170 | 40 |    |
|    | 30 | 9.798 4815 | 260 | 9.907 7233 | 431   | 0.092 2767 | 9.890 7582 | 171 | 30 |    |
|    | 40 | 9.798 5075 | 261 | 9.907 7664 | 431   | 0.092 2336 | 9.890 7411 | 170 | 20 |    |
|    | 50 | 9.798 5336 | 260 | 9.907 8095 | 430   | 0.092 1905 | 9.890 7241 | 170 | 10 |    |
| 58 | 0  | 9.798 5596 | 260 | 9.907 8525 | 431   | 0.092 1475 | 9.890 7071 | 171 | 0  | 2  |
|    | 10 | 9.798 5856 | 261 | 9.907 8956 | 431   | 0.092 1044 | 9.890 6900 | 170 | 50 |    |
|    | 20 | 9.798 6117 | 260 | 9.907 9387 | 430   | 0.092 0613 | 9.890 6730 | 170 | 40 |    |
|    | 30 | 9.798 6377 | 260 | 9.907 9817 | 431   | 0.092 0183 | 9.890 6560 | 171 | 30 |    |
|    | 40 | 9.798 6637 | 260 | 9.908 0248 | 430   | 0.091 9752 | 9.890 6389 | 170 | 20 |    |
|    | 50 | 9.798 6897 | 261 | 9.908 0678 | 431   | 0.091 9322 | 9.890 6219 | 170 | 10 |    |
| 59 | 0  | 9.798 7158 | 260 | 9.908 1109 | 430   | 0.091 8891 | 9.890 6049 | 171 | 0  | 1  |
|    | 10 | 9.798 7418 | 260 | 9.908 1539 | 431   | 0.091 8461 | 9.890 5878 | 170 | 50 |    |
|    | 20 | 9.798 7678 | 260 | 9.908 1970 | 431   | 0.091 8030 | 9.890 5708 | 171 | 40 |    |
|    | 30 | 9.798 7938 | 260 | 9.908 2401 | 430   | 0.091 7599 | 9.890 5537 | 170 | 30 |    |
|    | 40 | 9.798 8198 | 260 | 9.908 2831 | 431   | 0.091 7169 | 9.890 5367 | 171 | 20 |    |
|    | 50 | 9.798 8458 | 260 | 9.908 3262 | 430   | 0.091 6738 | 9.890 5196 | 170 | 10 |    |
| 60 | 0  | 9.798 8718 |     | 9.908 3692 |       | 0.091 6308 | 9.890 5026 |     | 0  | 0  |
|    | "  | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d.  | "  |    |



481

1 43.1  
2 43.2  
3 43.3  
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480

1 42.0  
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260

1 26.0  
2 26.1  
3 26.2  
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259

1 25.9  
2 25.8  
3 25.7  
4 25.6  
5 25.5  
6 25.4  
7 25.3  
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9 25.1

170

1 17.0  
2 17.1  
3 17.2  
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171

1 17.1  
2 17.2  
3 17.3  
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5 17.5  
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8 17.8  
9 17.9

|    | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Coa        | d.  | "  |    |
|----|----|------------|-----|------------|-------|------------|------------|-----|----|----|
| 0  | o  | 9.798 8718 | 260 | 9.908 3692 | 431   | 0.091 6308 | 9.890 5026 | 171 | o  | 60 |
|    | 10 | 9.798 8978 | 260 | 9.908 4123 | 430   | 0.091 5877 | 9.890 4855 | 170 | 50 |    |
|    | 20 | 9.798 9238 | 260 | 9.908 4553 | 431   | 0.091 5447 | 9.890 4685 | 171 | 40 |    |
|    | 30 | 9.798 9498 | 260 | 9.908 4984 | 430   | 0.091 5016 | 9.890 4514 | 170 | 30 |    |
|    | 40 | 9.798 9758 | 260 | 9.908 5414 | 431   | 0.091 4586 | 9.890 4344 | 171 | 20 |    |
|    | 50 | 9.799 0018 | 260 | 9.908 5845 | 430   | 0.091 4155 | 9.890 4173 | 170 | 10 |    |
| 1  | o  | 9.799 0278 | 259 | 9.908 6275 | 430   | 0.091 3725 | 9.890 4003 | 171 | o  | 59 |
|    | 10 | 9.799 0537 | 260 | 9.908 6705 | 431   | 0.091 3295 | 9.890 3832 | 171 | 50 |    |
|    | 20 | 9.799 0797 | 260 | 9.908 7136 | 430   | 0.091 2864 | 9.890 3661 | 170 | 40 |    |
|    | 30 | 9.799 1057 | 260 | 9.908 7566 | 431   | 0.091 2434 | 9.890 3491 | 171 | 30 |    |
|    | 40 | 9.799 1317 | 260 | 9.908 7997 | 430   | 0.091 2003 | 9.890 3320 | 171 | 20 |    |
|    | 50 | 9.799 1577 | 259 | 9.908 8427 | 431   | 0.091 1573 | 9.890 3149 | 170 | 10 |    |
| 2  | o  | 9.799 1836 | 260 | 9.908 8858 | 430   | 0.091 1142 | 9.890 2979 | 171 | o  | 58 |
|    | 10 | 9.799 2096 | 260 | 9.908 9288 | 430   | 0.091 0712 | 9.890 2808 | 171 | 50 |    |
|    | 20 | 9.799 2356 | 259 | 9.908 9718 | 431   | 0.091 0282 | 9.890 2637 | 170 | 40 |    |
|    | 30 | 9.799 2615 | 260 | 9.909 0149 | 430   | 0.090 9851 | 9.890 2467 | 171 | 30 |    |
|    | 40 | 9.799 2875 | 259 | 9.909 0579 | 431   | 0.090 9421 | 9.890 2296 | 171 | 20 |    |
|    | 50 | 9.799 3134 | 260 | 9.909 1010 | 430   | 0.090 8990 | 9.890 2125 | 171 | 10 |    |
| 3  | o  | 9.799 3394 | 260 | 9.909 1440 | 430   | 0.090 8560 | 9.890 1954 | 171 | o  | 57 |
|    | 10 | 9.799 3654 | 259 | 9.909 1870 | 431   | 0.090 8130 | 9.890 1783 | 170 | 50 |    |
|    | 20 | 9.799 3913 | 260 | 9.909 2301 | 430   | 0.090 7699 | 9.890 1613 | 171 | 40 |    |
|    | 30 | 9.799 4173 | 259 | 9.909 2731 | 431   | 0.090 7269 | 9.890 1442 | 171 | 30 |    |
|    | 40 | 9.799 4432 | 259 | 9.909 3161 | 430   | 0.090 6839 | 9.890 1271 | 171 | 20 |    |
|    | 50 | 9.799 4691 | 260 | 9.909 3592 | 431   | 0.090 6408 | 9.890 1100 | 171 | 10 |    |
| 4  | o  | 9.799 4951 | 259 | 9.909 4022 | 430   | 0.090 5978 | 9.890 0929 | 171 | o  | 56 |
|    | 10 | 9.799 5210 | 260 | 9.909 4452 | 430   | 0.090 5548 | 9.890 0758 | 171 | 50 |    |
|    | 20 | 9.799 5470 | 259 | 9.909 4882 | 431   | 0.090 5118 | 9.890 0587 | 171 | 40 |    |
|    | 30 | 9.799 5729 | 259 | 9.909 5313 | 430   | 0.090 4687 | 9.890 0416 | 171 | 30 |    |
|    | 40 | 9.799 5988 | 260 | 9.909 5743 | 430   | 0.090 4257 | 9.890 0245 | 171 | 20 |    |
|    | 50 | 9.799 6248 | 259 | 9.909 6173 | 430   | 0.090 3827 | 9.890 0074 | 171 | 10 |    |
| 5  | o  | 9.799 6507 | 259 | 9.909 6603 | 431   | 0.090 3397 | 9.889 9903 | 171 | o  | 55 |
|    | 10 | 9.799 6766 | 259 | 9.909 7034 | 430   | 0.090 2966 | 9.889 9732 | 171 | 50 |    |
|    | 20 | 9.799 7025 | 259 | 9.909 7464 | 430   | 0.090 2536 | 9.889 9561 | 171 | 40 |    |
|    | 30 | 9.799 7284 | 259 | 9.909 7894 | 430   | 0.090 2106 | 9.889 9390 | 171 | 30 |    |
|    | 40 | 9.799 7543 | 260 | 9.909 8324 | 431   | 0.090 1676 | 9.889 9219 | 171 | 20 |    |
|    | 50 | 9.799 7803 | 259 | 9.909 8755 | 430   | 0.090 1245 | 9.889 9048 | 171 | 10 |    |
| 6  | o  | 9.799 8062 | 259 | 9.909 9185 | 430   | 0.090 0815 | 9.889 8877 | 171 | o  | 54 |
|    | 10 | 9.799 8321 | 259 | 9.909 9615 | 430   | 0.090 0385 | 9.889 8706 | 171 | 50 |    |
|    | 20 | 9.799 8580 | 259 | 9.910 0045 | 430   | 0.089 9955 | 9.889 8535 | 171 | 40 |    |
|    | 30 | 9.799 8839 | 259 | 9.910 0475 | 430   | 0.089 9525 | 9.889 8364 | 171 | 30 |    |
|    | 40 | 9.799 9098 | 259 | 9.910 0905 | 431   | 0.089 9094 | 9.889 8192 | 171 | 20 |    |
|    | 50 | 9.799 9357 | 259 | 9.910 1336 | 430   | 0.089 8664 | 9.889 8021 | 171 | 10 |    |
| 7  | o  | 9.799 9616 | 259 | 9.910 1766 | 430   | 0.089 8234 | 9.889 7850 | 171 | o  | 53 |
|    | 10 | 9.799 9875 | 259 | 9.910 2196 | 430   | 0.089 7804 | 9.889 7679 | 171 | 50 |    |
|    | 20 | 9.800 0134 | 258 | 9.910 2626 | 430   | 0.089 7374 | 9.889 7507 | 171 | 40 |    |
|    | 30 | 9.800 0392 | 259 | 9.910 3056 | 430   | 0.089 6944 | 9.889 7336 | 171 | 30 |    |
|    | 40 | 9.800 0651 | 259 | 9.910 3486 | 430   | 0.089 6514 | 9.889 7165 | 171 | 20 |    |
|    | 50 | 9.800 0910 | 259 | 9.910 3916 | 431   | 0.089 6084 | 9.889 6994 | 171 | 10 |    |
| 8  | o  | 9.800 1169 | 259 | 9.910 4347 | 430   | 0.089 5653 | 9.889 6822 | 171 | o  | 52 |
|    | 10 | 9.800 1428 | 258 | 9.910 4777 | 430   | 0.089 5223 | 9.889 6651 | 171 | 50 |    |
|    | 20 | 9.800 1686 | 259 | 9.910 5207 | 430   | 0.089 4793 | 9.889 6480 | 171 | 40 |    |
|    | 30 | 9.800 1945 | 259 | 9.910 5637 | 430   | 0.089 4363 | 9.889 6308 | 171 | 30 |    |
|    | 40 | 9.800 2204 | 258 | 9.910 6067 | 430   | 0.089 3933 | 9.889 6137 | 171 | 20 |    |
|    | 50 | 9.800 2462 | 259 | 9.910 6497 | 430   | 0.089 3503 | 9.889 5966 | 171 | 10 |    |
| 9  | o  | 9.800 2721 | 259 | 9.910 6927 | 430   | 0.089 3073 | 9.889 5794 | 171 | o  | 51 |
|    | 10 | 9.800 2980 | 258 | 9.910 7357 | 430   | 0.089 2643 | 9.889 5623 | 171 | 50 |    |
|    | 20 | 9.800 3238 | 259 | 9.910 7787 | 430   | 0.089 2213 | 9.889 5451 | 171 | 40 |    |
|    | 30 | 9.800 3497 | 258 | 9.910 8217 | 430   | 0.089 1783 | 9.889 5280 | 171 | 30 |    |
|    | 40 | 9.800 3755 | 259 | 9.910 8647 | 430   | 0.089 1353 | 9.889 5108 | 171 | 20 |    |
|    | 50 | 9.800 4014 | 258 | 9.910 9077 | 430   | 0.089 0923 | 9.889 4937 | 171 | 10 |    |
| 10 | o  | 9.800 4272 | 258 | 9.910 9507 | 430   | 0.089 0493 | 9.889 4765 | 171 | o  | 50 |



|    | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d.  | "  |    |
|----|----|------------|-----|------------|-------|------------|------------|-----|----|----|
| 10 | o  | 9.800 4272 | 259 | 9.910 9507 | 430   | 0.089 0493 | 9.889 4765 | 171 | o  | 50 |
| 10 | 10 | 9.800 4531 | 258 | 9.910 9937 | 430   | 0.089 0063 | 9.889 4594 | 172 | 50 |    |
| 20 | 20 | 9.800 4789 | 258 | 9.911 0307 | 430   | 0.088 9633 | 9.889 4422 | 171 | 40 |    |
| 30 | 30 | 9.800 5048 | 258 | 9.911 0797 | 430   | 0.088 9203 | 9.889 4251 | 171 | 30 |    |
| 40 | 40 | 9.800 5306 | 258 | 9.911 1227 | 430   | 0.088 8773 | 9.889 4079 | 172 | 20 |    |
| 50 | 50 | 9.800 5564 | 259 | 9.911 1657 | 430   | 0.088 8343 | 9.889 3908 | 172 | 10 |    |
| 11 | o  | 9.800 5823 | 258 | 9.911 2087 | 430   | 0.088 7913 | 9.889 3736 | 172 | o  | 49 |
| 10 | 10 | 9.800 6081 | 258 | 9.911 2517 | 430   | 0.088 7483 | 9.889 3564 | 171 | 50 |    |
| 20 | 20 | 9.800 6339 | 259 | 9.911 2947 | 430   | 0.088 7053 | 9.889 3393 | 172 | 40 |    |
| 30 | 30 | 9.800 6598 | 258 | 9.911 3377 | 429   | 0.088 6623 | 9.889 3221 | 172 | 30 |    |
| 40 | 40 | 9.800 6856 | 258 | 9.911 3806 | 430   | 0.088 6194 | 9.889 3049 | 171 | 20 |    |
| 50 | 50 | 9.800 7114 | 258 | 9.911 4236 | 430   | 0.088 5764 | 9.889 2878 | 172 | 10 |    |
| 12 | o  | 9.800 7372 | 258 | 9.911 4666 | 430   | 0.088 5334 | 9.889 2706 | 172 | o  | 48 |
| 10 | 10 | 9.800 7630 | 258 | 9.911 5096 | 430   | 0.088 4904 | 9.889 2534 | 172 | 50 |    |
| 20 | 20 | 9.800 7888 | 259 | 9.911 5526 | 430   | 0.088 4474 | 9.889 2362 | 171 | 40 |    |
| 30 | 30 | 9.800 8147 | 258 | 9.911 5956 | 430   | 0.088 4044 | 9.889 2191 | 172 | 30 |    |
| 40 | 40 | 9.800 8405 | 258 | 9.911 6386 | 430   | 0.088 3614 | 9.889 2019 | 172 | 20 |    |
| 50 | 50 | 9.800 8663 | 258 | 9.911 6816 | 429   | 0.088 3184 | 9.889 1847 | 172 | 10 |    |
| 18 | o  | 9.800 8921 | 258 | 9.911 7245 | 430   | 0.088 2755 | 9.889 1675 | 172 | o  | 47 |
| 10 | 10 | 9.800 9179 | 258 | 9.911 7675 | 430   | 0.088 2325 | 9.889 1503 | 171 | 50 |    |
| 20 | 20 | 9.800 9437 | 258 | 9.911 8105 | 430   | 0.088 1895 | 9.889 1332 | 172 | 40 |    |
| 30 | 30 | 9.800 9695 | 257 | 9.911 8535 | 430   | 0.088 1465 | 9.889 1160 | 172 | 30 |    |
| 40 | 40 | 9.800 9952 | 258 | 9.911 8965 | 429   | 0.088 1035 | 9.889 0988 | 172 | 20 |    |
| 50 | 50 | 9.801 0210 | 258 | 9.911 9394 | 430   | 0.088 0606 | 9.889 0816 | 172 | 10 |    |
| 14 | o  | 9.801 0468 | 258 | 9.911 9824 | 430   | 0.088 0176 | 9.889 0644 | 172 | o  | 46 |
| 10 | 10 | 9.801 0726 | 258 | 9.912 0254 | 430   | 0.087 9746 | 9.889 0472 | 172 | 50 |    |
| 20 | 20 | 9.801 0984 | 258 | 9.912 0684 | 430   | 0.087 9316 | 9.889 0300 | 172 | 40 |    |
| 30 | 30 | 9.801 1242 | 257 | 9.912 1114 | 429   | 0.087 8886 | 9.889 0128 | 172 | 30 |    |
| 40 | 40 | 9.801 1499 | 258 | 9.912 1543 | 430   | 0.087 8457 | 9.889 0956 | 172 | 20 |    |
| 50 | 50 | 9.801 1757 | 258 | 9.912 1973 | 430   | 0.087 8027 | 9.889 0784 | 172 | 10 |    |
| 15 | o  | 9.801 2015 | 258 | 9.912 2403 | 429   | 0.087 7597 | 9.889 0612 | 172 | o  | 45 |
| 10 | 10 | 9.801 2273 | 257 | 9.912 2832 | 430   | 0.087 7168 | 9.889 0440 | 172 | 50 |    |
| 20 | 20 | 9.801 2530 | 258 | 9.912 3262 | 430   | 0.087 6738 | 9.889 0268 | 172 | 40 |    |
| 30 | 30 | 9.801 2788 | 258 | 9.912 3692 | 430   | 0.087 6308 | 9.889 0096 | 172 | 30 |    |
| 40 | 40 | 9.801 3046 | 258 | 9.912 4122 | 429   | 0.087 5878 | 9.889 0924 | 172 | 20 |    |
| 50 | 50 | 9.801 3303 | 257 | 9.912 4551 | 430   | 0.087 5449 | 9.889 0752 | 172 | 10 |    |
| 16 | o  | 9.801 3561 | 257 | 9.912 4981 | 430   | 0.087 5019 | 9.889 0580 | 172 | o  | 44 |
| 10 | 10 | 9.801 3818 | 258 | 9.912 5411 | 429   | 0.087 4589 | 9.889 0408 | 173 | 50 |    |
| 20 | 20 | 9.801 4076 | 257 | 9.912 5840 | 430   | 0.087 4160 | 9.889 0235 | 172 | 40 |    |
| 30 | 30 | 9.801 4333 | 258 | 9.912 6270 | 430   | 0.087 3730 | 9.889 0063 | 172 | 30 |    |
| 40 | 40 | 9.801 4591 | 257 | 9.912 6700 | 429   | 0.087 3300 | 9.889 0891 | 172 | 20 |    |
| 50 | 50 | 9.801 4848 | 258 | 9.912 7129 | 430   | 0.087 2871 | 9.889 0719 | 172 | 10 |    |
| 17 | o  | 9.801 5106 | 257 | 9.912 7559 | 430   | 0.087 2441 | 9.889 0547 | 173 | o  | 43 |
| 10 | 10 | 9.801 5363 | 257 | 9.912 7989 | 429   | 0.087 2011 | 9.889 0374 | 172 | 50 |    |
| 20 | 20 | 9.801 5620 | 258 | 9.912 8418 | 430   | 0.087 1582 | 9.889 0202 | 172 | 40 |    |
| 30 | 30 | 9.801 5878 | 257 | 9.912 8848 | 429   | 0.087 1152 | 9.889 0030 | 172 | 30 |    |
| 40 | 40 | 9.801 6135 | 257 | 9.912 9277 | 430   | 0.087 0723 | 9.889 0858 | 173 | 20 |    |
| 50 | 50 | 9.801 6392 | 257 | 9.912 9707 | 430   | 0.087 0293 | 9.889 0685 | 172 | 10 |    |
| 18 | o  | 9.801 6649 | 258 | 9.913 0137 | 429   | 0.086 9863 | 9.889 0513 | 172 | o  | 42 |
| 10 | 10 | 9.801 6907 | 257 | 9.913 0566 | 430   | 0.086 9434 | 9.889 0341 | 173 | 50 |    |
| 20 | 20 | 9.801 7164 | 257 | 9.913 0996 | 429   | 0.086 9004 | 9.889 0168 | 172 | 40 |    |
| 30 | 30 | 9.801 7421 | 257 | 9.913 1425 | 430   | 0.086 8575 | 9.889 0996 | 173 | 30 |    |
| 40 | 40 | 9.801 7678 | 257 | 9.913 1855 | 429   | 0.086 8145 | 9.889 0823 | 172 | 20 |    |
| 50 | 50 | 9.801 7935 | 257 | 9.913 2284 | 430   | 0.086 7716 | 9.889 0651 | 172 | 10 |    |
| 19 | o  | 9.801 8192 | 258 | 9.913 2714 | 429   | 0.086 7286 | 9.889 0479 | 173 | o  | 41 |
| 10 | 10 | 9.801 8450 | 257 | 9.913 3143 | 430   | 0.086 6857 | 9.889 0306 | 172 | 50 |    |
| 20 | 20 | 9.801 8707 | 257 | 9.913 3573 | 429   | 0.086 6427 | 9.889 0134 | 173 | 40 |    |
| 30 | 30 | 9.801 8964 | 257 | 9.913 4002 | 430   | 0.086 5998 | 9.889 0961 | 172 | 30 |    |
| 40 | 40 | 9.801 9221 | 257 | 9.913 4432 | 429   | 0.086 5568 | 9.889 0789 | 173 | 20 |    |
| 50 | 50 | 9.801 9478 | 257 | 9.913 4861 | 430   | 0.086 5139 | 9.889 0616 | 172 | 10 |    |
| 20 | o  | 9.801 9735 | 257 | 9.913 5291 | 430   | 0.086 4709 | 9.889 0444 | 172 | o  | 40 |
|    | "  | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d.  | "  |    |

430

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|         |    | Sin         | d.  | Tang       | d. c. | Cotg       | Cos        | d.  |    |    |
|---------|----|-------------|-----|------------|-------|------------|------------|-----|----|----|
| 430     | 20 | 0.9801 9735 | 256 | 9.913 5291 | 429   | 0.086 4709 | 9.888 4444 | 173 | 0  | 40 |
| 1 43.0  | 20 | 9.801 9991  | 257 | 9.913 5720 | 430   | 0.086 4280 | 9.888 4271 | 172 | 50 |    |
| 2 86.0  | 30 | 9.802 0248  | 257 | 9.913 6150 | 429   | 0.086 3850 | 9.888 4099 | 173 | 40 |    |
| 3 129.0 | 30 | 9.802 0505  | 257 | 9.913 6579 | 429   | 0.086 3421 | 9.888 3926 | 173 | 30 |    |
| 4 172.0 | 40 | 9.802 0762  | 257 | 9.913 7009 | 429   | 0.086 2991 | 9.888 3753 | 172 | 20 |    |
| 5 215.0 | 50 | 9.802 1019  | 257 | 9.913 7438 | 430   | 0.086 2562 | 9.888 3581 | 173 | 10 |    |
| 6 258.0 | 21 | 0.9802 1276 | 256 | 9.913 7868 | 429   | 0.086 2132 | 9.888 3408 | 173 | 0  | 39 |
| 7 301.0 | 10 | 9.802 1532  | 257 | 9.913 8297 | 429   | 0.086 1703 | 9.888 3235 | 172 | 50 |    |
| 8 344.0 | 20 | 9.802 1789  | 257 | 9.913 8726 | 429   | 0.086 1274 | 9.888 3063 | 173 | 40 |    |
| 9 387.0 | 30 | 9.802 2046  | 257 | 9.913 9156 | 429   | 0.086 0844 | 9.888 2890 | 173 | 30 |    |
|         | 40 | 9.802 2303  | 256 | 9.913 9585 | 430   | 0.086 0415 | 9.888 2717 | 172 | 20 |    |
|         | 50 | 9.802 2559  | 257 | 9.914 0015 | 429   | 0.085 9985 | 9.888 2545 | 173 | 10 |    |
| 420     | 22 | 0.9802 2816 | 257 | 9.914 0444 | 429   | 0.085 9556 | 9.888 2372 | 173 | 0  | 38 |
| 1 42.0  | 10 | 9.802 3073  | 256 | 9.914 0873 | 430   | 0.085 9127 | 9.888 2199 | 173 | 50 |    |
| 2 85.8  | 20 | 9.802 3329  | 257 | 9.914 1303 | 429   | 0.085 8697 | 9.888 2026 | 173 | 40 |    |
| 3 128.7 | 30 | 9.802 3586  | 256 | 9.914 1732 | 429   | 0.085 8268 | 9.888 1854 | 172 | 30 |    |
| 4 171.6 | 40 | 9.802 3842  | 257 | 9.914 2161 | 430   | 0.085 7839 | 9.888 1681 | 173 | 20 |    |
| 5 214.5 | 50 | 9.802 4099  | 256 | 9.914 2591 | 429   | 0.085 7409 | 9.888 1508 | 173 | 10 |    |
| 6 257.4 | 23 | 0.9802 4355 | 257 | 9.914 3020 | 429   | 0.085 6980 | 9.888 1335 | 173 | 0  | 37 |
| 7 300.3 | 10 | 9.802 4612  | 256 | 9.914 3449 | 430   | 0.085 6551 | 9.888 1162 | 173 | 50 |    |
| 8 343.2 | 20 | 9.802 4868  | 257 | 9.914 3879 | 429   | 0.085 6121 | 9.888 0989 | 172 | 40 |    |
| 9 386.1 | 30 | 9.802 5125  | 256 | 9.914 4308 | 429   | 0.085 5692 | 9.888 0817 | 173 | 30 |    |
|         | 40 | 9.802 5381  | 256 | 9.914 4737 | 430   | 0.085 5263 | 9.888 0644 | 173 | 20 |    |
|         | 50 | 9.802 5637  | 257 | 9.914 5167 | 429   | 0.085 4833 | 9.888 0471 | 173 | 10 |    |
| 267     | 24 | 0.9802 5894 | 256 | 9.914 5596 | 429   | 0.085 4404 | 9.888 0298 | 173 | 0  | 36 |
| 1 25.7  | 10 | 9.802 6150  | 256 | 9.914 6025 | 429   | 0.085 3975 | 9.888 0125 | 173 | 50 |    |
| 2 69.1  | 20 | 9.802 6406  | 257 | 9.914 6454 | 430   | 0.085 3546 | 9.887 9952 | 173 | 40 |    |
| 3 112.5 | 30 | 9.802 6663  | 256 | 9.914 6884 | 429   | 0.085 3116 | 9.887 9779 | 173 | 30 |    |
| 4 155.4 | 40 | 9.802 6919  | 256 | 9.914 7313 | 429   | 0.085 2687 | 9.887 9606 | 173 | 20 |    |
| 5 198.9 | 50 | 9.802 7175  | 256 | 9.914 7742 | 429   | 0.085 2258 | 9.887 9433 | 173 | 10 |    |
| 6 242.3 | 25 | 0.9802 7431 | 256 | 9.914 8171 | 430   | 0.085 1829 | 9.887 9260 | 173 | 0  | 35 |
|         | 10 | 9.802 7687  | 257 | 9.914 8601 | 429   | 0.085 1399 | 9.887 9087 | 173 | 50 |    |
|         | 20 | 9.802 7944  | 256 | 9.914 9030 | 429   | 0.085 0970 | 9.887 8914 | 173 | 40 |    |
| 250     | 30 | 9.802 8200  | 256 | 9.914 9459 | 429   | 0.085 0541 | 9.887 8741 | 174 | 30 |    |
| 1 25.6  | 40 | 9.802 8456  | 256 | 9.914 9888 | 430   | 0.085 0112 | 9.887 8567 | 173 | 20 |    |
| 2 69.1  | 50 | 9.802 8712  | 256 | 9.915 0318 | 429   | 0.084 9682 | 9.887 8394 | 173 | 10 |    |
| 3 112.5 | 26 | 0.9802 8968 | 256 | 9.915 0747 | 429   | 0.084 9253 | 9.887 8221 | 173 | 0  | 34 |
| 4 155.4 | 10 | 9.802 9224  | 256 | 9.915 1176 | 429   | 0.084 8824 | 9.887 8048 | 173 | 50 |    |
| 5 198.9 | 20 | 9.802 9480  | 256 | 9.915 1605 | 429   | 0.084 8395 | 9.887 7875 | 173 | 40 |    |
| 6 242.3 | 30 | 9.802 9736  | 256 | 9.915 2034 | 429   | 0.084 7966 | 9.887 7702 | 174 | 30 |    |
| 7 285.8 | 40 | 9.802 9992  | 256 | 9.915 2463 | 429   | 0.084 7537 | 9.887 7528 | 173 | 20 |    |
| 8 329.4 | 50 | 9.803 0248  | 256 | 9.915 2893 | 430   | 0.084 7107 | 9.887 7355 | 173 | 10 |    |
| 9 373.0 | 27 | 0.9803 0504 | 255 | 9.915 3322 | 429   | 0.084 6678 | 9.887 7182 | 173 | 0  | 33 |
|         | 10 | 9.803 0759  | 256 | 9.915 3751 | 429   | 0.084 6249 | 9.887 7009 | 173 | 50 |    |
|         | 20 | 9.803 1015  | 256 | 9.915 4180 | 429   | 0.084 5820 | 9.887 6835 | 174 | 40 |    |
| 172     | 30 | 9.803 1271  | 256 | 9.915 4609 | 429   | 0.084 5391 | 9.887 6662 | 173 | 30 |    |
| 1 17.4  | 40 | 9.803 1527  | 256 | 9.915 5038 | 429   | 0.084 4962 | 9.887 6489 | 173 | 20 |    |
| 2 60.4  | 50 | 9.803 1783  | 255 | 9.915 5467 | 429   | 0.084 4533 | 9.887 6315 | 174 | 10 |    |
| 3 103.8 | 28 | 0.9803 2038 | 256 | 9.915 5896 | 429   | 0.084 4104 | 9.887 6142 | 173 | 0  | 32 |
| 4 147.2 | 10 | 9.803 2294  | 256 | 9.915 6325 | 429   | 0.084 3675 | 9.887 5969 | 174 | 50 |    |
| 5 190.6 | 20 | 9.803 2550  | 255 | 9.915 6754 | 430   | 0.084 3246 | 9.887 5795 | 173 | 40 |    |
| 6 234.0 | 30 | 9.803 2805  | 256 | 9.915 7184 | 429   | 0.084 2816 | 9.887 5622 | 173 | 30 |    |
| 7 277.4 | 40 | 9.803 3061  | 256 | 9.915 7613 | 429   | 0.084 2387 | 9.887 5449 | 174 | 20 |    |
| 8 320.8 | 50 | 9.803 3317  | 255 | 9.915 8042 | 429   | 0.084 1958 | 9.887 5275 | 173 | 10 |    |
| 9 364.2 | 29 | 0.9803 3572 | 256 | 9.915 8471 | 429   | 0.084 1529 | 9.887 5102 | 174 | 0  | 31 |
|         | 10 | 9.803 3828  | 255 | 9.915 8900 | 429   | 0.084 1100 | 9.887 4928 | 173 | 50 |    |
|         | 20 | 9.803 4083  | 256 | 9.915 9329 | 429   | 0.084 0671 | 9.887 4755 | 174 | 40 |    |
|         | 30 | 9.803 4339  | 255 | 9.915 9758 | 429   | 0.084 0242 | 9.887 4581 | 173 | 30 |    |
|         | 40 | 9.803 4594  | 256 | 9.916 0187 | 429   | 0.083 9813 | 9.887 4408 | 174 | 20 |    |
|         | 50 | 9.803 4850  | 255 | 9.916 0616 | 429   | 0.083 9384 | 9.887 4234 | 173 | 10 |    |
| 173     | 30 | 0.9803 5105 | 255 | 9.916 1045 | 429   | 0.083 8955 | 9.887 4061 | 174 | 0  | 30 |
| 1 17.3  |    |             |     |            |       |            |            |     |    |    |
| 2 60.4  |    |             |     |            |       |            |            |     |    |    |
| 3 103.8 |    |             |     |            |       |            |            |     |    |    |
| 4 147.2 |    |             |     |            |       |            |            |     |    |    |
| 5 190.6 |    |             |     |            |       |            |            |     |    |    |
| 6 234.0 |    |             |     |            |       |            |            |     |    |    |
| 7 277.4 |    |             |     |            |       |            |            |     |    |    |
| 8 320.8 |    |             |     |            |       |            |            |     |    |    |
| 9 364.2 |    |             |     |            |       |            |            |     |    |    |
| 9 355.7 |    |             |     |            |       |            |            |     |    |    |
|         |    | Cos         | d.  | Cotg       | d. c. | Tang       | Sin        | d.  |    |    |



|    | "  | sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d.  | "  |    |
|----|----|------------|-----|------------|-------|------------|------------|-----|----|----|
| 30 | 0  | 9.803 5105 | 256 | 9.916 1045 | 429   | 0.083 8955 | 9.887 4061 | 174 | 0  | 30 |
|    | 10 | 9.803 5361 | 255 | 9.916 1474 | 429   | 0.083 8526 | 9.887 3887 | 174 | 50 |    |
|    | 20 | 9.803 5616 | 255 | 9.916 1903 | 429   | 0.083 8097 | 9.887 3713 | 173 | 40 |    |
|    | 30 | 9.803 5871 | 256 | 9.916 2332 | 429   | 0.083 7668 | 9.887 3540 | 174 | 30 |    |
|    | 40 | 9.803 6127 | 255 | 9.916 2761 | 429   | 0.083 7239 | 9.887 3366 | 173 | 20 |    |
|    | 50 | 9.803 6382 | 255 | 9.916 3190 | 428   | 0.083 6810 | 9.887 3193 | 174 | 10 |    |
| 31 | 0  | 9.803 6637 | 256 | 9.916 3618 | 429   | 0.083 6382 | 9.887 3019 | 174 | 0  | 29 |
|    | 10 | 9.803 6893 | 255 | 9.916 4047 | 429   | 0.083 5953 | 9.887 2845 | 174 | 50 |    |
|    | 20 | 9.803 7148 | 255 | 9.916 4476 | 429   | 0.083 5524 | 9.887 2671 | 173 | 40 |    |
|    | 30 | 9.803 7403 | 255 | 9.916 4905 | 429   | 0.083 5095 | 9.887 2498 | 174 | 30 |    |
|    | 40 | 9.803 7658 | 255 | 9.916 5334 | 429   | 0.083 4666 | 9.887 2324 | 174 | 20 |    |
|    | 50 | 9.803 7913 | 255 | 9.916 5763 | 429   | 0.083 4237 | 9.887 2150 | 173 | 10 |    |
| 32 | 0  | 9.803 8168 | 256 | 9.916 6192 | 429   | 0.083 3808 | 9.887 1977 | 174 | 0  | 28 |
|    | 10 | 9.803 8424 | 255 | 9.916 6621 | 429   | 0.083 3379 | 9.887 1803 | 174 | 50 |    |
|    | 20 | 9.803 8679 | 255 | 9.916 7050 | 429   | 0.083 2950 | 9.887 1629 | 174 | 40 |    |
|    | 30 | 9.803 8934 | 255 | 9.916 7479 | 428   | 0.083 2521 | 9.887 1455 | 174 | 30 |    |
|    | 40 | 9.803 9189 | 255 | 9.916 7907 | 429   | 0.083 2093 | 9.887 1281 | 174 | 20 |    |
|    | 50 | 9.803 9444 | 255 | 9.916 8336 | 429   | 0.083 1664 | 9.887 1107 | 173 | 10 |    |
| 33 | 0  | 9.803 9699 | 255 | 9.916 8765 | 429   | 0.083 1235 | 9.887 0934 | 174 | 0  | 27 |
|    | 10 | 9.803 9954 | 255 | 9.916 9194 | 429   | 0.083 0806 | 9.887 0760 | 174 | 50 |    |
|    | 20 | 9.804 0209 | 255 | 9.916 9623 | 429   | 0.083 0377 | 9.887 0586 | 174 | 40 |    |
|    | 30 | 9.804 0464 | 254 | 9.917 0052 | 428   | 0.082 9948 | 9.887 0412 | 174 | 30 |    |
|    | 40 | 9.804 0718 | 255 | 9.917 0480 | 429   | 0.082 9520 | 9.887 0238 | 174 | 20 |    |
|    | 50 | 9.804 0973 | 255 | 9.917 0909 | 429   | 0.082 9091 | 9.887 0064 | 174 | 10 |    |
| 34 | 0  | 9.804 1228 | 255 | 9.917 1338 | 429   | 0.082 8662 | 9.886 9890 | 174 | 0  | 26 |
|    | 10 | 9.804 1483 | 255 | 9.917 1767 | 429   | 0.082 8233 | 9.886 9716 | 174 | 50 |    |
|    | 20 | 9.804 1738 | 254 | 9.917 2196 | 428   | 0.082 7804 | 9.886 9542 | 174 | 40 |    |
|    | 30 | 9.804 1992 | 255 | 9.917 2624 | 429   | 0.082 7376 | 9.886 9368 | 174 | 30 |    |
|    | 40 | 9.804 2247 | 255 | 9.917 3053 | 429   | 0.082 6947 | 9.886 9194 | 174 | 20 |    |
|    | 50 | 9.804 2502 | 255 | 9.917 3482 | 429   | 0.082 6518 | 9.886 9020 | 174 | 10 |    |
| 35 | 0  | 9.804 2757 | 254 | 9.917 3911 | 428   | 0.082 6089 | 9.886 8846 | 174 | 0  | 25 |
|    | 10 | 9.804 3011 | 255 | 9.917 4339 | 429   | 0.082 5661 | 9.886 8672 | 174 | 50 |    |
|    | 20 | 9.804 3266 | 254 | 9.917 4768 | 429   | 0.082 5232 | 9.886 8498 | 174 | 40 |    |
|    | 30 | 9.804 3520 | 255 | 9.917 5197 | 429   | 0.082 4803 | 9.886 8324 | 175 | 30 |    |
|    | 40 | 9.804 3775 | 255 | 9.917 5626 | 428   | 0.082 4374 | 9.886 8149 | 174 | 20 |    |
|    | 50 | 9.804 4030 | 254 | 9.917 6054 | 429   | 0.082 3946 | 9.886 7975 | 174 | 10 |    |
| 36 | 0  | 9.804 4284 | 255 | 9.917 6483 | 429   | 0.082 3517 | 9.886 7801 | 174 | 0  | 24 |
|    | 10 | 9.804 4539 | 254 | 9.917 6912 | 428   | 0.082 3088 | 9.886 7627 | 174 | 50 |    |
|    | 20 | 9.804 4793 | 254 | 9.917 7340 | 429   | 0.082 2660 | 9.886 7453 | 175 | 40 |    |
|    | 30 | 9.804 5047 | 255 | 9.917 7769 | 429   | 0.082 2231 | 9.886 7278 | 174 | 30 |    |
|    | 40 | 9.804 5302 | 254 | 9.917 8198 | 428   | 0.082 1802 | 9.886 7104 | 174 | 20 |    |
|    | 50 | 9.804 5556 | 255 | 9.917 8626 | 429   | 0.082 1374 | 9.886 6930 | 174 | 10 |    |
| 37 | 0  | 9.804 5811 | 254 | 9.917 9055 | 429   | 0.082 0945 | 9.886 6756 | 175 | 0  | 23 |
|    | 10 | 9.804 6065 | 254 | 9.917 9484 | 428   | 0.082 0516 | 9.886 6581 | 174 | 50 |    |
|    | 20 | 9.804 6319 | 255 | 9.917 9912 | 429   | 0.082 0088 | 9.886 6407 | 174 | 40 |    |
|    | 30 | 9.804 6574 | 254 | 9.918 0341 | 429   | 0.081 9659 | 9.886 6233 | 175 | 30 |    |
|    | 40 | 9.804 6828 | 254 | 9.918 0770 | 428   | 0.081 9230 | 9.886 6058 | 174 | 20 |    |
|    | 50 | 9.804 7082 | 254 | 9.918 1198 | 429   | 0.081 8802 | 9.886 5884 | 174 | 10 |    |
| 38 | 0  | 9.804 7336 | 255 | 9.918 1627 | 428   | 0.081 8373 | 9.886 5710 | 175 | 0  | 22 |
|    | 10 | 9.804 7591 | 254 | 9.918 2055 | 429   | 0.081 7945 | 9.886 5535 | 174 | 50 |    |
|    | 20 | 9.804 7845 | 254 | 9.918 2484 | 429   | 0.081 7516 | 9.886 5361 | 175 | 40 |    |
|    | 30 | 9.804 8099 | 254 | 9.918 2913 | 428   | 0.081 7087 | 9.886 5186 | 174 | 30 |    |
|    | 40 | 9.804 8353 | 254 | 9.918 3341 | 429   | 0.081 6659 | 9.886 5012 | 175 | 20 |    |
|    | 50 | 9.804 8607 | 254 | 9.918 3770 | 428   | 0.081 6230 | 9.886 4837 | 174 | 10 |    |
| 39 | 0  | 9.804 8861 | 254 | 9.918 4198 | 429   | 0.081 5802 | 9.886 4663 | 175 | 0  | 21 |
|    | 10 | 9.804 9115 | 254 | 9.918 4627 | 428   | 0.081 5373 | 9.886 4488 | 174 | 50 |    |
|    | 20 | 9.804 9369 | 254 | 9.918 5055 | 429   | 0.081 4945 | 9.886 4314 | 175 | 40 |    |
|    | 30 | 9.804 9623 | 254 | 9.918 5484 | 428   | 0.081 4516 | 9.886 4139 | 174 | 30 |    |
|    | 40 | 9.804 9877 | 254 | 9.918 5912 | 429   | 0.081 4088 | 9.886 3965 | 175 | 20 |    |
|    | 50 | 9.805 0131 | 254 | 9.918 6341 | 428   | 0.081 3659 | 9.886 3790 | 174 | 10 |    |
| 40 | 0  | 9.805 0385 | 254 | 9.918 6769 | 428   | 0.081 3231 | 9.886 3616 | 174 | 0  | 20 |
|    |    |            |     |            |       |            |            |     |    |    |
|    | "  | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d.  | "  |    |



429  
1 42.9  
2 85.8  
3 128.7  
4 171.6  
5 214.5  
6 257.4  
7 300.3  
8 343.2  
9 386.1

428  
1 42.8  
2 85.6  
3 128.4  
4 171.2  
5 214.0  
6 256.8  
7 299.6  
8 342.4  
9 385.2

254  
1 25.4  
2 50.8  
3 76.2  
4 101.6  
5 127.0  
6 152.4  
7 177.8  
8 203.2  
9 228.6

253  
1 25.3  
2 50.6  
3 75.9  
4 101.2  
5 126.5  
6 151.8  
7 177.1  
8 202.4  
9 227.7

174  
1 17.4  
2 34.8  
3 52.2  
4 69.6  
5 87.0  
6 104.4  
7 121.8  
8 139.2  
9 156.6

175  
1 17.5  
2 35.0  
3 52.5  
4 70.0  
5 87.5  
6 105.0  
7 122.5  
8 140.0  
9 157.5

|    | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Coa        | d.  | "  |    |
|----|----|------------|-----|------------|-------|------------|------------|-----|----|----|
| 40 | 0  | 9.805 0385 | 254 | 9.918 6769 | 429   | 0.081 3231 | 9.886 3616 | 175 | 0  | 20 |
|    | 10 | 9.805 0639 | 254 | 9.918 7198 | 428   | 0.081 2802 | 9.886 3441 | 175 | 50 |    |
|    | 20 | 9.805 0893 | 254 | 9.918 7626 | 429   | 0.081 2374 | 9.886 3266 | 174 | 40 |    |
|    | 30 | 9.805 1147 | 254 | 9.918 8055 | 428   | 0.081 1945 | 9.886 3092 | 174 | 30 |    |
|    | 40 | 9.805 1401 | 254 | 9.918 8483 | 429   | 0.081 1517 | 9.886 2917 | 174 | 20 |    |
|    | 50 | 9.805 1654 | 254 | 9.918 8912 | 428   | 0.081 1088 | 9.886 2743 | 174 | 10 |    |
| 41 | 0  | 9.805 1908 | 254 | 9.918 9340 | 428   | 0.081 0660 | 9.886 2568 | 175 | 0  | 19 |
|    | 10 | 9.805 2162 | 254 | 9.918 9769 | 428   | 0.081 0231 | 9.886 2393 | 175 | 50 |    |
|    | 20 | 9.805 2416 | 254 | 9.919 0197 | 429   | 0.080 9803 | 9.886 2218 | 174 | 40 |    |
|    | 30 | 9.805 2669 | 254 | 9.919 0626 | 428   | 0.080 9374 | 9.886 2044 | 174 | 30 |    |
|    | 40 | 9.805 2923 | 254 | 9.919 1054 | 429   | 0.080 8946 | 9.886 1869 | 175 | 20 |    |
|    | 50 | 9.805 3177 | 254 | 9.919 1483 | 428   | 0.080 8517 | 9.886 1694 | 175 | 10 |    |
| 42 | 0  | 9.805 3430 | 254 | 9.919 1911 | 428   | 0.080 8089 | 9.886 1519 | 175 | 0  | 18 |
|    | 10 | 9.805 3684 | 253 | 9.919 2339 | 429   | 0.080 7661 | 9.886 1344 | 174 | 50 |    |
|    | 20 | 9.805 3937 | 254 | 9.919 2768 | 428   | 0.080 7232 | 9.886 1170 | 175 | 40 |    |
|    | 30 | 9.805 4191 | 254 | 9.919 3196 | 429   | 0.080 6804 | 9.886 0995 | 175 | 30 |    |
|    | 40 | 9.805 4445 | 254 | 9.919 3625 | 428   | 0.080 6375 | 9.886 0820 | 175 | 20 |    |
|    | 50 | 9.805 4698 | 253 | 9.919 4053 | 429   | 0.080 5947 | 9.886 0645 | 175 | 10 |    |
| 43 | 0  | 9.805 4951 | 254 | 9.919 4481 | 429   | 0.080 5519 | 9.886 0470 | 175 | 0  | 17 |
|    | 10 | 9.805 5205 | 253 | 9.919 4910 | 428   | 0.080 5090 | 9.886 0295 | 175 | 50 |    |
|    | 20 | 9.805 5458 | 254 | 9.919 5338 | 429   | 0.080 4662 | 9.886 0120 | 175 | 40 |    |
|    | 30 | 9.805 5712 | 254 | 9.919 5766 | 428   | 0.080 4234 | 9.885 9945 | 175 | 30 |    |
|    | 40 | 9.805 5965 | 253 | 9.919 6195 | 429   | 0.080 3805 | 9.885 9770 | 175 | 20 |    |
|    | 50 | 9.805 6218 | 254 | 9.919 6623 | 428   | 0.080 3377 | 9.885 9595 | 175 | 10 |    |
| 44 | 0  | 9.805 6472 | 253 | 9.919 7051 | 429   | 0.080 2949 | 9.885 9420 | 175 | 0  | 16 |
|    | 10 | 9.805 6725 | 254 | 9.919 7480 | 428   | 0.080 2520 | 9.885 9245 | 175 | 50 |    |
|    | 20 | 9.805 6978 | 254 | 9.919 7908 | 429   | 0.080 2092 | 9.885 9070 | 175 | 40 |    |
|    | 30 | 9.805 7232 | 253 | 9.919 8336 | 428   | 0.080 1664 | 9.885 8895 | 175 | 30 |    |
|    | 40 | 9.805 7485 | 253 | 9.919 8765 | 429   | 0.080 1235 | 9.885 8720 | 175 | 20 |    |
|    | 50 | 9.805 7738 | 253 | 9.919 9193 | 428   | 0.080 0807 | 9.885 8545 | 175 | 10 |    |
| 45 | 0  | 9.805 7991 | 253 | 9.919 9621 | 428   | 0.080 0379 | 9.885 8370 | 175 | 0  | 15 |
|    | 10 | 9.805 8244 | 253 | 9.920 0049 | 429   | 0.079 9951 | 9.885 8195 | 175 | 50 |    |
|    | 20 | 9.805 8497 | 254 | 9.920 0478 | 428   | 0.079 9522 | 9.885 8020 | 175 | 40 |    |
|    | 30 | 9.805 8751 | 253 | 9.920 0906 | 429   | 0.079 9094 | 9.885 7845 | 176 | 30 |    |
|    | 40 | 9.805 9004 | 253 | 9.920 1334 | 428   | 0.079 8666 | 9.885 7669 | 175 | 20 |    |
|    | 50 | 9.805 9257 | 253 | 9.920 1762 | 429   | 0.079 8238 | 9.885 7494 | 175 | 10 |    |
| 46 | 0  | 9.805 9510 | 253 | 9.920 2191 | 428   | 0.079 7809 | 9.885 7319 | 175 | 0  | 14 |
|    | 10 | 9.805 9763 | 253 | 9.920 2619 | 429   | 0.079 7381 | 9.885 7144 | 175 | 50 |    |
|    | 20 | 9.806 0016 | 253 | 9.920 3047 | 428   | 0.079 6953 | 9.885 6969 | 176 | 40 |    |
|    | 30 | 9.806 0269 | 253 | 9.920 3475 | 429   | 0.079 6525 | 9.885 6793 | 175 | 30 |    |
|    | 40 | 9.806 0522 | 252 | 9.920 3904 | 428   | 0.079 6096 | 9.885 6618 | 175 | 20 |    |
|    | 50 | 9.806 0774 | 253 | 9.920 4332 | 429   | 0.079 5668 | 9.885 6443 | 176 | 10 |    |
| 47 | 0  | 9.806 1027 | 253 | 9.920 4760 | 428   | 0.079 5240 | 9.885 6267 | 175 | 0  | 13 |
|    | 10 | 9.806 1280 | 253 | 9.920 5188 | 429   | 0.079 4812 | 9.885 6092 | 175 | 50 |    |
|    | 20 | 9.806 1533 | 253 | 9.920 5616 | 428   | 0.079 4384 | 9.885 5917 | 176 | 40 |    |
|    | 30 | 9.806 1786 | 253 | 9.920 6044 | 429   | 0.079 3956 | 9.885 5741 | 175 | 30 |    |
|    | 40 | 9.806 2039 | 252 | 9.920 6473 | 428   | 0.079 3527 | 9.885 5566 | 175 | 20 |    |
|    | 50 | 9.806 2291 | 253 | 9.920 6901 | 429   | 0.079 3099 | 9.885 5391 | 176 | 10 |    |
| 48 | 0  | 9.806 2544 | 253 | 9.920 7329 | 428   | 0.079 2671 | 9.885 5215 | 175 | 0  | 12 |
|    | 10 | 9.806 2797 | 252 | 9.920 7757 | 429   | 0.079 2243 | 9.885 5040 | 176 | 50 |    |
|    | 20 | 9.806 3049 | 253 | 9.920 8185 | 428   | 0.079 1815 | 9.885 4864 | 175 | 40 |    |
|    | 30 | 9.806 3302 | 253 | 9.920 8613 | 429   | 0.079 1387 | 9.885 4689 | 176 | 30 |    |
|    | 40 | 9.806 3555 | 252 | 9.920 9041 | 428   | 0.079 0959 | 9.885 4513 | 175 | 20 |    |
|    | 50 | 9.806 3807 | 253 | 9.920 9469 | 429   | 0.079 0531 | 9.885 4338 | 176 | 10 |    |
| 49 | 0  | 9.806 4060 | 252 | 9.920 9898 | 428   | 0.079 0102 | 9.885 4162 | 175 | 0  | 11 |
|    | 10 | 9.806 4312 | 253 | 9.921 0326 | 429   | 0.078 9674 | 9.885 3987 | 176 | 50 |    |
|    | 20 | 9.806 4565 | 252 | 9.921 0754 | 428   | 0.078 9246 | 9.885 3811 | 175 | 40 |    |
|    | 30 | 9.806 4817 | 253 | 9.921 1182 | 429   | 0.078 8818 | 9.885 3636 | 176 | 30 |    |
|    | 40 | 9.806 5070 | 252 | 9.921 1610 | 428   | 0.078 8390 | 9.885 3460 | 176 | 20 |    |
|    | 50 | 9.806 5322 | 253 | 9.921 2038 | 429   | 0.078 7962 | 9.885 3284 | 175 | 10 |    |
| 50 | 0  | 9.806 5575 | 253 | 9.921 2466 | 428   | 0.078 7534 | 9.885 3109 | 175 | 0  | 10 |
|    | "  | Coa        | d.  | Cotg       | d. c. | Tang       | Sin        | d.  | "  |    |



|    | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d.  | "  |    |
|----|----|------------|-----|------------|-------|------------|------------|-----|----|----|
| 50 | 0  | 9.806 5575 | 252 | 9.921 2466 | 428   | 0.078 7534 | 9.885 3109 | 176 | 0  | 10 |
|    | 10 | 9.806 5827 | 253 | 9.921 2894 | 428   | 0.078 7106 | 9.885 2933 | 175 | 50 |    |
|    | 20 | 9.806 6080 | 252 | 9.921 3322 | 428   | 0.078 6678 | 9.885 2758 | 176 | 40 |    |
|    | 30 | 9.806 6332 | 252 | 9.921 3750 | 428   | 0.078 6250 | 9.885 2582 | 176 | 30 |    |
|    | 40 | 9.806 6584 | 253 | 9.921 4178 | 428   | 0.078 5822 | 9.885 2406 | 176 | 20 |    |
|    | 50 | 9.806 6837 | 252 | 9.921 4606 | 428   | 0.078 5394 | 9.885 2230 | 175 | 10 |    |
| 51 | 0  | 9.806 7089 | 252 | 9.921 5034 | 428   | 0.078 4966 | 9.885 2055 | 176 | 0  | 9  |
|    | 10 | 9.806 7341 | 252 | 9.921 5462 | 428   | 0.078 4538 | 9.885 1879 | 176 | 50 |    |
|    | 20 | 9.806 7593 | 253 | 9.921 5890 | 428   | 0.078 4110 | 9.885 1703 | 176 | 40 |    |
|    | 30 | 9.806 7846 | 252 | 9.921 6318 | 428   | 0.078 3682 | 9.885 1527 | 175 | 30 |    |
|    | 40 | 9.806 8098 | 252 | 9.921 6746 | 428   | 0.078 3254 | 9.885 1352 | 176 | 20 |    |
|    | 50 | 9.806 8350 | 252 | 9.921 7174 | 428   | 0.078 2826 | 9.885 1176 | 176 | 10 |    |
| 52 | 0  | 9.806 8602 | 252 | 9.921 7602 | 428   | 0.078 2398 | 9.885 1000 | 176 | 0  | 8  |
|    | 10 | 9.806 8854 | 252 | 9.921 8030 | 428   | 0.078 1970 | 9.885 0824 | 176 | 50 |    |
|    | 20 | 9.806 9106 | 252 | 9.921 8458 | 428   | 0.078 1542 | 9.885 0648 | 176 | 40 |    |
|    | 30 | 9.806 9358 | 252 | 9.921 8886 | 428   | 0.078 1114 | 9.885 0472 | 175 | 30 |    |
|    | 40 | 9.806 9610 | 252 | 9.921 9314 | 428   | 0.078 0686 | 9.885 0297 | 176 | 20 |    |
|    | 50 | 9.806 9862 | 252 | 9.921 9742 | 428   | 0.078 0258 | 9.885 0121 | 176 | 10 |    |
| 53 | 0  | 9.807 0114 | 252 | 9.922 0170 | 428   | 0.077 9830 | 9.884 9945 | 176 | 0  | 7  |
|    | 10 | 9.807 0366 | 252 | 9.922 0598 | 427   | 0.077 9402 | 9.884 9769 | 176 | 50 |    |
|    | 20 | 9.807 0618 | 252 | 9.922 1025 | 428   | 0.077 8975 | 9.884 9593 | 176 | 40 |    |
|    | 30 | 9.807 0870 | 252 | 9.922 1453 | 428   | 0.077 8547 | 9.884 9417 | 176 | 30 |    |
|    | 40 | 9.807 1122 | 252 | 9.922 1881 | 428   | 0.077 8119 | 9.884 9241 | 176 | 20 |    |
|    | 50 | 9.807 1374 | 252 | 9.922 2309 | 428   | 0.077 7691 | 9.884 9065 | 176 | 10 |    |
| 54 | 0  | 9.807 1626 | 251 | 9.922 2737 | 428   | 0.077 7263 | 9.884 8889 | 176 | 0  | 6  |
|    | 10 | 9.807 1877 | 252 | 9.922 3165 | 428   | 0.077 6835 | 9.884 8713 | 176 | 50 |    |
|    | 20 | 9.807 2129 | 252 | 9.922 3593 | 427   | 0.077 6407 | 9.884 8537 | 177 | 40 |    |
|    | 30 | 9.807 2381 | 252 | 9.922 4020 | 428   | 0.077 5980 | 9.884 8360 | 176 | 30 |    |
|    | 40 | 9.807 2633 | 251 | 9.922 4448 | 428   | 0.077 5552 | 9.884 8184 | 176 | 20 |    |
|    | 50 | 9.807 2884 | 252 | 9.922 4876 | 428   | 0.077 5124 | 9.884 8008 | 176 | 10 |    |
| 55 | 0  | 9.807 3136 | 252 | 9.922 5304 | 428   | 0.077 4696 | 9.884 7832 | 176 | 0  | 5  |
|    | 10 | 9.807 3388 | 251 | 9.922 5732 | 428   | 0.077 4268 | 9.884 7656 | 176 | 50 |    |
|    | 20 | 9.807 3639 | 252 | 9.922 6160 | 427   | 0.077 3840 | 9.884 7480 | 176 | 40 |    |
|    | 30 | 9.807 3891 | 252 | 9.922 6587 | 428   | 0.077 3413 | 9.884 7304 | 177 | 30 |    |
|    | 40 | 9.807 4143 | 251 | 9.922 7015 | 428   | 0.077 2985 | 9.884 7127 | 176 | 20 |    |
|    | 50 | 9.807 4394 | 252 | 9.922 7443 | 428   | 0.077 2557 | 9.884 6951 | 176 | 10 |    |
| 56 | 0  | 9.807 4646 | 251 | 9.922 7871 | 428   | 0.077 2129 | 9.884 6775 | 176 | 0  | 4  |
|    | 10 | 9.807 4897 | 252 | 9.922 8299 | 427   | 0.077 1701 | 9.884 6599 | 177 | 50 |    |
|    | 20 | 9.807 5149 | 251 | 9.922 8726 | 428   | 0.077 1274 | 9.884 6422 | 176 | 40 |    |
|    | 30 | 9.807 5400 | 252 | 9.922 9154 | 428   | 0.077 0846 | 9.884 6246 | 176 | 30 |    |
|    | 40 | 9.807 5652 | 251 | 9.922 9582 | 428   | 0.077 0418 | 9.884 6070 | 177 | 20 |    |
|    | 50 | 9.807 5903 | 251 | 9.923 0010 | 427   | 0.076 9990 | 9.884 5893 | 176 | 10 |    |
| 57 | 0  | 9.807 6154 | 252 | 9.923 0437 | 428   | 0.076 9563 | 9.884 5717 | 176 | 0  | 3  |
|    | 10 | 9.807 6406 | 251 | 9.923 0865 | 428   | 0.076 9135 | 9.884 5541 | 177 | 50 |    |
|    | 20 | 9.807 6657 | 251 | 9.923 1293 | 427   | 0.076 8707 | 9.884 5364 | 176 | 40 |    |
|    | 30 | 9.807 6908 | 252 | 9.923 1720 | 428   | 0.076 8280 | 9.884 5188 | 177 | 30 |    |
|    | 40 | 9.807 7160 | 251 | 9.923 2148 | 428   | 0.076 7852 | 9.884 5011 | 176 | 20 |    |
|    | 50 | 9.807 7411 | 251 | 9.923 2576 | 428   | 0.076 7424 | 9.884 4835 | 176 | 10 |    |
| 58 | 0  | 9.807 7662 | 251 | 9.923 3004 | 427   | 0.076 6996 | 9.884 4659 | 177 | 0  | 2  |
|    | 10 | 9.807 7913 | 251 | 9.923 3431 | 428   | 0.076 6569 | 9.884 4482 | 176 | 50 |    |
|    | 20 | 9.807 8164 | 252 | 9.923 3859 | 428   | 0.076 6141 | 9.884 4306 | 177 | 40 |    |
|    | 30 | 9.807 8416 | 251 | 9.923 4287 | 427   | 0.076 5713 | 9.884 4129 | 176 | 30 |    |
|    | 40 | 9.807 8667 | 251 | 9.923 4714 | 428   | 0.076 5286 | 9.884 3953 | 177 | 20 |    |
|    | 50 | 9.807 8918 | 251 | 9.923 5142 | 428   | 0.076 4858 | 9.884 3776 | 177 | 10 |    |
| 59 | 0  | 9.807 9169 | 251 | 9.923 5570 | 427   | 0.076 4430 | 9.884 3599 | 176 | 0  | 1  |
|    | 10 | 9.807 9420 | 251 | 9.923 5997 | 428   | 0.076 4003 | 9.884 3423 | 177 | 50 |    |
|    | 20 | 9.807 9671 | 251 | 9.923 6425 | 427   | 0.076 3575 | 9.884 3246 | 176 | 40 |    |
|    | 30 | 9.807 9922 | 251 | 9.923 6852 | 428   | 0.076 3148 | 9.884 3070 | 177 | 30 |    |
|    | 40 | 9.808 0173 | 251 | 9.923 7280 | 428   | 0.076 2720 | 9.884 2893 | 177 | 20 |    |
|    | 50 | 9.808 0424 | 251 | 9.923 7708 | 427   | 0.076 2292 | 9.884 2716 | 176 | 10 |    |
| 60 | 0  | 9.808 0675 | 251 | 9.923 8135 | 427   | 0.076 1865 | 9.884 2540 | 176 | 0  | 0  |
|    |    | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d.  | "  |    |



|         |    | Sin        | d.         | Tang       | d. c.      | Cotg       | Cos        | d.         |     |    |    |
|---------|----|------------|------------|------------|------------|------------|------------|------------|-----|----|----|
|         | 0  | 0          | 9.808 0675 | 251        | 9.923 8135 | 428        | 0.076 1865 | 9.884 2540 | 177 | 0  | 60 |
| 428     | 10 | 9.808 0926 | 251        | 9.923 8563 | 427        | 0.076 1437 | 9.884 2363 | 177        | 50  |    |    |
| 1 42.8  | 20 | 9.808 1177 | 251        | 9.923 8990 | 428        | 0.076 1010 | 9.884 2186 | 177        | 40  |    |    |
| 2 85.6  | 30 | 9.808 1428 | 250        | 9.923 9418 | 428        | 0.076 0582 | 9.884 2010 | 177        | 30  |    |    |
| 3 128.4 | 40 | 9.808 1678 | 251        | 9.923 9846 | 427        | 0.076 0154 | 9.884 1833 | 177        | 20  |    |    |
| 4 171.2 | 50 | 9.808 1929 | 251        | 9.924 0273 | 428        | 0.075 9727 | 9.884 1656 | 177        | 10  |    |    |
| 5 214.0 | 1  | 0          | 9.808 2180 | 251        | 9.924 0701 | 427        | 0.075 9299 | 9.884 1479 | 177 | 0  | 59 |
| 6 256.8 | 10 | 9.808 2431 | 251        | 9.924 1128 | 428        | 0.075 8872 | 9.884 1303 | 177        | 50  |    |    |
| 7 299.6 | 20 | 9.808 2682 | 250        | 9.924 1556 | 427        | 0.075 8444 | 9.884 1126 | 177        | 40  |    |    |
| 8 342.4 | 30 | 9.808 2932 | 251        | 9.924 1983 | 428        | 0.075 8017 | 9.884 0949 | 177        | 30  |    |    |
| 9 385.2 | 40 | 9.808 3183 | 251        | 9.924 2411 | 427        | 0.075 7589 | 9.884 0772 | 177        | 20  |    |    |
| 427     | 50 | 9.808 3434 | 250        | 9.924 2838 | 428        | 0.075 7162 | 9.884 0595 | 177        | 10  |    |    |
| 1 42.7  | 2  | 0          | 9.808 3684 | 251        | 9.924 3266 | 427        | 0.075 6734 | 9.884 0418 | 177 | 0  | 58 |
| 2 85.4  | 10 | 9.808 3935 | 251        | 9.924 3693 | 428        | 0.075 6307 | 9.884 0241 | 177        | 50  |    |    |
| 3 128.1 | 20 | 9.808 4186 | 250        | 9.924 4121 | 427        | 0.075 5879 | 9.884 0065 | 177        | 40  |    |    |
| 4 170.8 | 30 | 9.808 4436 | 251        | 9.924 4548 | 428        | 0.075 5452 | 9.883 9888 | 177        | 30  |    |    |
| 5 213.5 | 40 | 9.808 4687 | 250        | 9.924 4976 | 427        | 0.075 5024 | 9.883 9711 | 177        | 20  |    |    |
| 6 256.2 | 50 | 9.808 4937 | 251        | 9.924 5403 | 428        | 0.075 4597 | 9.883 9534 | 177        | 10  |    |    |
| 7 298.9 | 3  | 0          | 9.808 5188 | 250        | 9.924 5831 | 427        | 0.075 4169 | 9.883 9357 | 177 | 0  | 57 |
| 8 341.6 | 10 | 9.808 5438 | 251        | 9.924 6258 | 428        | 0.075 3742 | 9.883 9180 | 177        | 50  |    |    |
| 9 384.3 | 20 | 9.808 5689 | 250        | 9.924 6686 | 427        | 0.075 3314 | 9.883 9003 | 177        | 40  |    |    |
| 251     | 30 | 9.808 5939 | 251        | 9.924 7113 | 428        | 0.075 2887 | 9.883 8826 | 177        | 30  |    |    |
| 1 25.1  | 40 | 9.808 6189 | 250        | 9.924 7541 | 427        | 0.075 2459 | 9.883 8649 | 177        | 20  |    |    |
| 2 50.2  | 50 | 9.808 6440 | 251        | 9.924 7968 | 428        | 0.075 2032 | 9.883 8472 | 177        | 10  |    |    |
| 3 75.3  | 4  | 0          | 9.808 6690 | 250        | 9.924 8396 | 427        | 0.075 1604 | 9.883 8294 | 177 | 0  | 56 |
| 4 100.4 | 10 | 9.808 6940 | 251        | 9.924 8823 | 428        | 0.075 1177 | 9.883 8117 | 177        | 50  |    |    |
| 5 125.5 | 20 | 9.808 7191 | 250        | 9.924 9250 | 427        | 0.075 0750 | 9.883 7940 | 177        | 40  |    |    |
| 6 150.6 | 30 | 9.808 7441 | 251        | 9.924 9678 | 428        | 0.075 0322 | 9.883 7763 | 177        | 30  |    |    |
| 7 175.7 | 40 | 9.808 7691 | 250        | 9.925 0105 | 427        | 0.074 9895 | 9.883 7586 | 177        | 20  |    |    |
| 8 200.8 | 50 | 9.808 7941 | 251        | 9.925 0533 | 428        | 0.074 9467 | 9.883 7409 | 177        | 10  |    |    |
| 9 225.9 | 5  | 0          | 9.808 8192 | 250        | 9.925 0960 | 427        | 0.074 9040 | 9.883 7232 | 177 | 0  | 55 |
| 260     | 10 | 9.808 8442 | 251        | 9.925 1387 | 428        | 0.074 8613 | 9.883 7054 | 177        | 50  |    |    |
| 1 25.0  | 20 | 9.808 8692 | 250        | 9.925 1815 | 427        | 0.074 8185 | 9.883 6877 | 177        | 40  |    |    |
| 2 50.0  | 30 | 9.808 8942 | 251        | 9.925 2242 | 428        | 0.074 7758 | 9.883 6700 | 177        | 30  |    |    |
| 3 75.0  | 40 | 9.808 9192 | 250        | 9.925 2670 | 427        | 0.074 7330 | 9.883 6523 | 177        | 20  |    |    |
| 4 100.0 | 50 | 9.808 9442 | 251        | 9.925 3097 | 428        | 0.074 6903 | 9.883 6345 | 177        | 10  |    |    |
| 5 125.0 | 6  | 0          | 9.808 9692 | 250        | 9.925 3524 | 427        | 0.074 6476 | 9.883 6168 | 177 | 0  | 54 |
| 6 150.0 | 10 | 9.808 9942 | 251        | 9.925 3952 | 428        | 0.074 6048 | 9.883 5991 | 177        | 50  |    |    |
| 7 175.0 | 20 | 9.809 0192 | 250        | 9.925 4379 | 427        | 0.074 5621 | 9.883 5813 | 177        | 40  |    |    |
| 8 200.0 | 30 | 9.809 0442 | 251        | 9.925 4806 | 428        | 0.074 5194 | 9.883 5636 | 177        | 30  |    |    |
| 9 225.0 | 40 | 9.809 0692 | 250        | 9.925 5233 | 427        | 0.074 4767 | 9.883 5459 | 177        | 20  |    |    |
| 176     | 50 | 9.809 0942 | 251        | 9.925 5661 | 428        | 0.074 4339 | 9.883 5281 | 177        | 10  |    |    |
| 1 17.6  | 7  | 0          | 9.809 1192 | 250        | 9.925 6088 | 427        | 0.074 3912 | 9.883 5104 | 177 | 0  | 53 |
| 2 35.2  | 10 | 9.809 1442 | 251        | 9.925 6515 | 428        | 0.074 3485 | 9.883 4927 | 177        | 50  |    |    |
| 3 52.8  | 20 | 9.809 1692 | 250        | 9.925 6943 | 427        | 0.074 3057 | 9.883 4749 | 177        | 40  |    |    |
| 4 70.4  | 30 | 9.809 1942 | 249        | 9.925 7370 | 428        | 0.074 2630 | 9.883 4572 | 177        | 30  |    |    |
| 5 88.0  | 40 | 9.809 2191 | 251        | 9.925 7797 | 427        | 0.074 2203 | 9.883 4394 | 177        | 20  |    |    |
| 6 105.6 | 50 | 9.809 2441 | 250        | 9.925 8225 | 428        | 0.074 1775 | 9.883 4217 | 177        | 10  |    |    |
| 7 123.2 | 8  | 0          | 9.809 2691 | 251        | 9.925 8652 | 427        | 0.074 1348 | 9.883 4039 | 177 | 0  | 52 |
| 8 140.8 | 10 | 9.809 2941 | 249        | 9.925 9079 | 428        | 0.074 0921 | 9.883 3862 | 177        | 50  |    |    |
| 9 158.4 | 20 | 9.809 3190 | 250        | 9.925 9506 | 427        | 0.074 0494 | 9.883 3684 | 177        | 40  |    |    |
| 177     | 30 | 9.809 3440 | 251        | 9.925 9933 | 428        | 0.074 0067 | 9.883 3507 | 177        | 30  |    |    |
| 1 17.7  | 40 | 9.809 3690 | 250        | 9.926 0361 | 427        | 0.073 9639 | 9.883 3329 | 177        | 20  |    |    |
| 2 35.4  | 50 | 9.809 3939 | 249        | 9.926 0788 | 428        | 0.073 9212 | 9.883 3151 | 177        | 10  |    |    |
| 3 53.1  | 9  | 0          | 9.809 4189 | 251        | 9.926 1215 | 427        | 0.073 8785 | 9.883 2974 | 177 | 0  | 51 |
| 4 70.8  | 10 | 9.809 4439 | 249        | 9.926 1642 | 428        | 0.073 8358 | 9.883 2796 | 177        | 50  |    |    |
| 5 88.5  | 20 | 9.809 4688 | 250        | 9.926 2070 | 427        | 0.073 7930 | 9.883 2619 | 177        | 40  |    |    |
| 6 106.2 | 30 | 9.809 4938 | 249        | 9.926 2497 | 428        | 0.073 7503 | 9.883 2441 | 177        | 30  |    |    |
| 7 123.9 | 40 | 9.809 5187 | 251        | 9.926 2924 | 427        | 0.073 7076 | 9.883 2263 | 177        | 20  |    |    |
| 8 141.6 | 50 | 9.809 5437 | 250        | 9.926 3351 | 428        | 0.073 6649 | 9.883 2086 | 177        | 10  |    |    |
| 9 159.3 | 10 | 9.809 5686 | 249        | 9.926 3778 | 427        | 0.073 6222 | 9.883 1908 | 177        | 0   | 50 |    |
|         |    | Cos        | d.         | Cotg       | d. c.      | Tang       | Sin        | d.         |     |    |    |



|      | Sin        | d.   | Tang       | d. c. | Cotg       | Cos        | d.  | n  | r  |
|------|------------|------|------------|-------|------------|------------|-----|----|----|
| 1    | 0.989 2686 | 230  | 0.926 3778 | 427   | 0.073 6222 | 0.883 1908 | 178 | 0  | 50 |
| 10   | 0.989 3916 | 249  | 0.926 4204 | 428   | 0.073 5795 | 0.883 1730 | 178 | 50 |    |
| 20   | 0.989 5146 | 269  | 0.926 4634 | 427   | 0.073 5367 | 0.883 1552 | 178 | 40 |    |
| 30   | 0.989 6376 | 289  | 0.926 5064 | 427   | 0.073 4940 | 0.883 1375 | 178 | 30 |    |
| 40   | 0.989 7606 | 310  | 0.926 5494 | 427   | 0.073 4513 | 0.883 1197 | 178 | 20 |    |
| 50   | 0.989 8836 | 330  | 0.926 5924 | 427   | 0.073 4086 | 0.883 1019 | 178 | 10 |    |
| 60   | 0.989 9066 | 350  | 0.926 6354 | 427   | 0.073 3659 | 0.883 0841 | 178 | 0  | 49 |
| 70   | 0.989 9296 | 370  | 0.926 6784 | 427   | 0.073 3232 | 0.883 0663 | 177 | 50 |    |
| 80   | 0.989 9526 | 390  | 0.926 7214 | 428   | 0.073 2805 | 0.883 0486 | 178 | 40 |    |
| 90   | 0.989 9756 | 410  | 0.926 7644 | 427   | 0.073 2377 | 0.883 0308 | 178 | 30 |    |
| 100  | 0.989 9986 | 430  | 0.926 8074 | 427   | 0.073 1950 | 0.883 0130 | 178 | 20 |    |
| 110  | 0.989 9986 | 450  | 0.926 8504 | 427   | 0.073 1523 | 0.882 9952 | 178 | 10 |    |
| 120  | 0.989 9986 | 470  | 0.926 8934 | 427   | 0.073 1096 | 0.882 9774 | 178 | 0  | 48 |
| 130  | 0.989 9986 | 490  | 0.926 9364 | 427   | 0.073 0669 | 0.882 9596 | 178 | 50 |    |
| 140  | 0.989 9986 | 510  | 0.926 9794 | 427   | 0.073 0242 | 0.882 9418 | 178 | 40 |    |
| 150  | 0.989 9986 | 530  | 0.926 9885 | 427   | 0.072 9815 | 0.882 9240 | 178 | 30 |    |
| 160  | 0.989 9986 | 550  | 0.926 9885 | 427   | 0.072 9388 | 0.882 9062 | 178 | 20 |    |
| 170  | 0.989 9986 | 570  | 0.926 9885 | 427   | 0.072 8961 | 0.882 8884 | 178 | 10 |    |
| 180  | 0.989 9986 | 590  | 0.926 9885 | 427   | 0.072 8534 | 0.882 8706 | 178 | 0  | 47 |
| 190  | 0.989 9986 | 610  | 0.926 9885 | 427   | 0.072 8107 | 0.882 8528 | 178 | 50 |    |
| 200  | 0.989 9986 | 630  | 0.926 9885 | 427   | 0.072 7680 | 0.882 8350 | 178 | 40 |    |
| 210  | 0.989 9986 | 650  | 0.926 9885 | 427   | 0.072 7253 | 0.882 8172 | 178 | 30 |    |
| 220  | 0.989 9986 | 670  | 0.926 9885 | 427   | 0.072 6826 | 0.882 7994 | 178 | 20 |    |
| 230  | 0.989 9986 | 690  | 0.926 9885 | 427   | 0.072 6399 | 0.882 7816 | 178 | 10 |    |
| 240  | 0.989 9986 | 710  | 0.926 9885 | 427   | 0.072 5972 | 0.882 7638 | 179 | 0  | 46 |
| 250  | 0.989 9986 | 730  | 0.926 9885 | 427   | 0.072 5545 | 0.882 7459 | 178 | 50 |    |
| 260  | 0.989 9986 | 750  | 0.926 9885 | 427   | 0.072 5118 | 0.882 7281 | 178 | 40 |    |
| 270  | 0.989 9986 | 770  | 0.926 9885 | 427   | 0.072 4691 | 0.882 7103 | 178 | 30 |    |
| 280  | 0.989 9986 | 790  | 0.926 9885 | 427   | 0.072 4264 | 0.882 6925 | 178 | 20 |    |
| 290  | 0.989 9986 | 810  | 0.926 9885 | 427   | 0.072 3837 | 0.882 6747 | 179 | 10 |    |
| 300  | 0.989 9986 | 830  | 0.926 9885 | 427   | 0.072 3410 | 0.882 6568 | 178 | 0  | 45 |
| 310  | 0.989 9986 | 850  | 0.926 9885 | 427   | 0.072 2983 | 0.882 6390 | 178 | 50 |    |
| 320  | 0.989 9986 | 870  | 0.926 9885 | 427   | 0.072 2556 | 0.882 6212 | 178 | 40 |    |
| 330  | 0.989 9986 | 890  | 0.926 9885 | 427   | 0.072 2129 | 0.882 6034 | 179 | 30 |    |
| 340  | 0.989 9986 | 910  | 0.926 9885 | 427   | 0.072 1702 | 0.882 5855 | 178 | 20 |    |
| 350  | 0.989 9986 | 930  | 0.926 9885 | 427   | 0.072 1275 | 0.882 5677 | 178 | 10 |    |
| 360  | 0.989 9986 | 950  | 0.926 9885 | 427   | 0.072 0848 | 0.882 5499 | 179 | 0  | 44 |
| 370  | 0.989 9986 | 970  | 0.926 9885 | 427   | 0.072 0421 | 0.882 5320 | 178 | 50 |    |
| 380  | 0.989 9986 | 990  | 0.926 9885 | 427   | 0.071 9994 | 0.882 5142 | 179 | 40 |    |
| 390  | 0.989 9986 | 1010 | 0.926 9885 | 427   | 0.071 9567 | 0.882 4963 | 178 | 30 |    |
| 400  | 0.989 9986 | 1030 | 0.926 9885 | 427   | 0.071 9141 | 0.882 4785 | 178 | 20 |    |
| 410  | 0.989 9986 | 1050 | 0.926 9885 | 427   | 0.071 8714 | 0.882 4607 | 179 | 10 |    |
| 420  | 0.989 9986 | 1070 | 0.926 9885 | 427   | 0.071 8287 | 0.882 4428 | 178 | 0  | 43 |
| 430  | 0.989 9986 | 1090 | 0.926 9885 | 427   | 0.071 7860 | 0.882 4250 | 179 | 50 |    |
| 440  | 0.989 9986 | 1110 | 0.926 9885 | 427   | 0.071 7433 | 0.882 4071 | 178 | 40 |    |
| 450  | 0.989 9986 | 1130 | 0.926 9885 | 427   | 0.071 7006 | 0.882 3893 | 179 | 30 |    |
| 460  | 0.989 9986 | 1150 | 0.926 9885 | 427   | 0.071 6579 | 0.882 3714 | 178 | 20 |    |
| 470  | 0.989 9986 | 1170 | 0.926 9885 | 427   | 0.071 6152 | 0.882 3536 | 179 | 10 |    |
| 480  | 0.989 9986 | 1190 | 0.926 9885 | 427   | 0.071 5726 | 0.882 3357 | 178 | 0  | 42 |
| 490  | 0.989 9986 | 1210 | 0.926 9885 | 427   | 0.071 5299 | 0.882 3179 | 179 | 50 |    |
| 500  | 0.989 9986 | 1230 | 0.926 9885 | 427   | 0.071 4872 | 0.882 3000 | 179 | 40 |    |
| 510  | 0.989 9986 | 1250 | 0.926 9885 | 427   | 0.071 4445 | 0.882 2821 | 178 | 30 |    |
| 520  | 0.989 9986 | 1270 | 0.926 9885 | 427   | 0.071 4018 | 0.882 2643 | 179 | 20 |    |
| 530  | 0.989 9986 | 1290 | 0.926 9885 | 427   | 0.071 3591 | 0.882 2464 | 179 | 10 |    |
| 540  | 0.989 9986 | 1310 | 0.926 9885 | 427   | 0.071 3165 | 0.882 2285 | 178 | 0  | 41 |
| 550  | 0.989 9986 | 1330 | 0.926 9885 | 427   | 0.071 2738 | 0.882 2107 | 179 | 50 |    |
| 560  | 0.989 9986 | 1350 | 0.926 9885 | 427   | 0.071 2311 | 0.882 1928 | 179 | 40 |    |
| 570  | 0.989 9986 | 1370 | 0.926 9885 | 427   | 0.071 1884 | 0.882 1749 | 178 | 30 |    |
| 580  | 0.989 9986 | 1390 | 0.926 9885 | 427   | 0.071 1458 | 0.882 1571 | 179 | 20 |    |
| 590  | 0.989 9986 | 1410 | 0.926 9885 | 427   | 0.071 1031 | 0.882 1392 | 179 | 10 |    |
| 600  | 0.989 9986 | 1430 | 0.926 9885 | 427   | 0.071 0604 | 0.882 1213 | 178 | 0  | 40 |
| 610  | 0.989 9986 | 1450 | 0.926 9885 | 427   | 0.071 0177 | 0.882 1034 | 178 | 50 |    |
| 620  | 0.989 9986 | 1470 | 0.926 9885 | 427   | 0.070 9750 | 0.882 0855 | 178 | 40 |    |
| 630  | 0.989 9986 | 1490 | 0.926 9885 | 427   | 0.070 9323 | 0.882 0676 | 178 | 30 |    |
| 640  | 0.989 9986 | 1510 | 0.926 9885 | 427   | 0.070 8896 | 0.882 0497 | 178 | 20 |    |
| 650  | 0.989 9986 | 1530 | 0.926 9885 | 427   | 0.070 8469 | 0.882 0318 | 178 | 10 |    |
| 660  | 0.989 9986 | 1550 | 0.926 9885 | 427   | 0.070 8042 | 0.882 0139 | 178 | 0  | 39 |
| 670  | 0.989 9986 | 1570 | 0.926 9885 | 427   | 0.070 7615 | 0.882 0000 | 178 | 50 |    |
| 680  | 0.989 9986 | 1590 | 0.926 9885 | 427   | 0.070 7188 | 0.882 0000 | 178 | 40 |    |
| 690  | 0.989 9986 | 1610 | 0.926 9885 | 427   | 0.070 6761 | 0.882 0000 | 178 | 30 |    |
| 700  | 0.989 9986 | 1630 | 0.926 9885 | 427   | 0.070 6334 | 0.882 0000 | 178 | 20 |    |
| 710  | 0.989 9986 | 1650 | 0.926 9885 | 427   | 0.070 5907 | 0.882 0000 | 178 | 10 |    |
| 720  | 0.989 9986 | 1670 | 0.926 9885 | 427   | 0.070 5480 | 0.882 0000 | 178 | 0  | 38 |
| 730  | 0.989 9986 | 1690 | 0.926 9885 | 427   | 0.070 5053 | 0.882 0000 | 178 | 50 |    |
| 740  | 0.989 9986 | 1710 | 0.926 9885 | 427   | 0.070 4626 | 0.882 0000 | 178 | 40 |    |
| 750  | 0.989 9986 | 1730 | 0.926 9885 | 427   | 0.070 4199 | 0.882 0000 | 178 | 30 |    |
| 760  | 0.989 9986 | 1750 | 0.926 9885 | 427   | 0.070 3772 | 0.882 0000 | 178 | 20 |    |
| 770  | 0.989 9986 | 1770 | 0.926 9885 | 427   | 0.070 3345 | 0.882 0000 | 178 | 10 |    |
| 780  | 0.989 9986 | 1790 | 0.926 9885 | 427   | 0.070 2918 | 0.882 0000 | 178 | 0  | 37 |
| 790  | 0.989 9986 | 1810 | 0.926 9885 | 427   | 0.070 2491 | 0.882 0000 | 178 | 50 |    |
| 800  | 0.989 9986 | 1830 | 0.926 9885 | 427   | 0.070 2064 | 0.882 0000 | 178 | 40 |    |
| 810  | 0.989 9986 | 1850 | 0.926 9885 | 427   | 0.070 1637 | 0.882 0000 | 178 | 30 |    |
| 820  | 0.989 9986 | 1870 | 0.926 9885 | 427   | 0.070 1210 | 0.882 0000 | 178 | 20 |    |
| 830  | 0.989 9986 | 1890 | 0.926 9885 | 427   | 0.070 0783 | 0.882 0000 | 178 | 10 |    |
| 840  | 0.989 9986 | 1910 | 0.926 9885 | 427   | 0.070 0356 | 0.882 0000 | 178 | 0  | 36 |
| 850  | 0.989 9986 | 1930 | 0.926 9885 | 427   | 0.070 0000 | 0.882 0000 | 178 | 50 |    |
| 860  | 0.989 9986 | 1950 | 0.926 9885 | 427   | 0.070 0000 | 0.882 0000 | 178 | 40 |    |
| 870  | 0.989 9986 | 1970 | 0.926 9885 | 427   | 0.070 0000 | 0.882 0000 | 178 | 30 |    |
| 880  | 0.989 9986 | 1990 | 0.926 9885 | 427   | 0.070 0000 | 0.882 0000 | 178 | 20 |    |
| 890  | 0.989 9986 | 2010 | 0.926 9885 | 427   | 0.070 0000 | 0.882 0000 | 178 | 10 |    |
| 900  | 0.989 9986 | 2030 | 0.926 9885 | 427   | 0.070 0000 | 0.882 0000 | 178 | 0  | 35 |
| 910  | 0.989 9986 | 2050 | 0.926 9885 | 427   | 0.070 0000 | 0.882 0000 | 178 | 50 |    |
| 920  | 0.989 9986 | 2070 | 0.926 9885 | 427   | 0.070 0000 | 0.882 0000 | 178 | 40 |    |
| 930  | 0.989 9986 | 2090 | 0.926 9885 | 427   | 0.070 0000 | 0.882 0000 | 178 | 30 |    |
| 940  | 0.989 9986 | 2110 | 0.926 9885 | 427   | 0.070 0000 | 0.882 0000 | 178 | 20 |    |
| 950  | 0.989 9986 | 2130 | 0.926 9885 | 427   | 0.070 0000 | 0.882 0000 | 178 | 10 |    |
| 960  | 0.989 9986 | 2150 | 0.926 9885 | 427   | 0.070 0000 | 0.882 0000 | 178 | 0  | 34 |
| 970  | 0.989 9986 | 2170 | 0.926 9885 | 427   | 0.070 0000 | 0.882 0000 | 178 | 50 |    |
| 980  | 0.989 9986 | 2190 | 0.926 9885 | 427   | 0.070 0000 | 0.882 0000 | 178 | 40 |    |
| 990  | 0.989 9986 | 2210 | 0.926 9885 | 427   | 0.070 0000 | 0.882 0000 | 178 | 30 |    |
| 1000 | 0.989 9986 | 2230 | 0.926 9885 | 427   | 0.070 0000 | 0.882 0000 | 178 | 20 |    |
| 1010 | 0.989 9986 | 2250 | 0.926 9885 | 427   | 0.070 0000 | 0.882 0000 | 178 | 10 |    |
| 1020 | 0.989 9986 | 2270 | 0.926 9885 | 427   | 0.070 0000 | 0.882 0000 | 178 | 0  | 33 |
| 1030 | 0.989 9986 | 2290 | 0.926 9885 | 427   | 0.070 0000 | 0.882 0000 | 178 | 50 |    |
| 1040 | 0.989 9986 | 2310 | 0.926 9885 | 427   | 0.070 0000 | 0.882 0000 | 178 | 40 |    |
| 1050 | 0.989 9986 | 2330 | 0.926 9885 | 427   | 0.070 0000 | 0.882 0000 | 178 | 30 |    |
| 1060 | 0.989 9986 | 2350 | 0.926 9885 | 427   | 0.070 0000 | 0.882 0000 | 178 | 20 |    |
| 1070 | 0.989 9986 | 2370 | 0.926 9885 | 427   | 0.070 0000 | 0.882 0000 | 178 | 10 |    |
| 1080 | 0.989 9986 | 2390 | 0.926 9885 | 427   | 0.070 0000 | 0.882 0000 | 178 | 0  | 32 |
| 1090 | 0.989 9986 | 2410 | 0.926 9885 | 427   | 0.070 0000 | 0.882 0000 | 178 | 50 |    |
| 1100 | 0.989 9986 | 2430 | 0.926 9885 | 427   | 0.070 0000 | 0.882 0000 | 178 | 40 |    |
| 1110 | 0.         |      |            |       |            |            |     |    |    |



|         |    | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d.  |    |    |
|---------|----|------------|-----|------------|-------|------------|------------|-----|----|----|
| 427     | 20 | 0.811 0609 | 248 | 9.928 9396 | 427   | 0.071 0604 | 9.882 1213 | 179 | 0  | 40 |
| 1 42.7  | 10 | 0.811 0857 | 248 | 9.928 9823 | 426   | 0.071 0177 | 9.882 1034 | 178 | 50 |    |
| 2 81.4  | 20 | 0.811 1105 | 248 | 9.929 0249 | 427   | 0.070 9751 | 9.882 0856 | 179 | 40 |    |
| 3 128.1 | 30 | 0.811 1353 | 248 | 9.929 0676 | 427   | 0.070 9324 | 9.882 0677 | 179 | 30 |    |
| 4 170.8 | 40 | 0.811 1601 | 248 | 9.929 1103 | 427   | 0.070 8897 | 9.882 0498 | 179 | 20 |    |
| 5 213.5 | 50 | 0.811 1849 | 247 | 9.929 1530 | 426   | 0.070 8470 | 9.882 0319 | 179 | 10 |    |
| 6 256.2 | 21 | 0.811 2096 | 248 | 9.929 1956 | 427   | 0.070 8044 | 9.882 0140 | 179 | 0  | 39 |
| 7 298.9 | 10 | 0.811 2344 | 248 | 9.929 2383 | 427   | 0.070 7617 | 9.881 9961 | 179 | 50 |    |
| 8 341.6 | 20 | 0.811 2592 | 248 | 9.929 2810 | 426   | 0.070 7190 | 9.881 9782 | 179 | 40 |    |
| 9 384.3 | 30 | 0.811 2840 | 248 | 9.929 3236 | 426   | 0.070 6764 | 9.881 9603 | 178 | 30 |    |
| 426     | 40 | 0.811 3088 | 247 | 9.929 3663 | 427   | 0.070 6337 | 9.881 9425 | 179 | 20 |    |
| 1 42.6  | 50 | 0.811 3335 | 248 | 9.929 4090 | 426   | 0.070 5910 | 9.881 9246 | 179 | 10 |    |
| 2 85.2  | 22 | 0.811 3583 | 248 | 9.929 4516 | 427   | 0.070 5484 | 9.881 9067 | 179 | 0  | 38 |
| 3 127.8 | 10 | 0.811 3831 | 247 | 9.929 4943 | 427   | 0.070 5057 | 9.881 8888 | 179 | 50 |    |
| 4 170.4 | 20 | 0.811 4078 | 248 | 9.929 5370 | 426   | 0.070 4630 | 9.881 8709 | 179 | 40 |    |
| 5 213.0 | 30 | 0.811 4326 | 248 | 9.929 5796 | 427   | 0.070 4204 | 9.881 8530 | 179 | 30 |    |
| 6 255.6 | 40 | 0.811 4574 | 247 | 9.929 6223 | 427   | 0.070 3777 | 9.881 8351 | 180 | 20 |    |
| 7 298.2 | 50 | 0.811 4821 | 248 | 9.929 6650 | 426   | 0.070 3350 | 9.881 8171 | 179 | 10 |    |
| 8 340.8 | 23 | 0.811 5069 | 247 | 9.929 7076 | 427   | 0.070 2924 | 9.881 7992 | 179 | 0  | 37 |
| 9 383.4 | 10 | 0.811 5316 | 248 | 9.929 7503 | 427   | 0.070 2497 | 9.881 7813 | 179 | 50 |    |
| 248     | 20 | 0.811 5564 | 248 | 9.929 7930 | 426   | 0.070 2070 | 9.881 7634 | 179 | 40 |    |
| 1 24.8  | 30 | 0.811 5811 | 248 | 9.929 8356 | 427   | 0.070 1644 | 9.881 7455 | 179 | 30 |    |
| 2 49.6  | 40 | 0.811 6059 | 247 | 9.929 8783 | 426   | 0.070 1217 | 9.881 7276 | 179 | 20 |    |
| 3 74.4  | 50 | 0.811 6306 | 248 | 9.929 9209 | 427   | 0.070 0791 | 9.881 7097 | 179 | 10 |    |
| 4 99.2  | 24 | 0.811 6554 | 247 | 9.929 9636 | 427   | 0.070 0364 | 9.881 6918 | 180 | 0  | 36 |
| 5 124.0 | 10 | 0.811 6801 | 247 | 9.930 0063 | 427   | 0.069 9937 | 9.881 6738 | 179 | 50 |    |
| 6 148.8 | 20 | 0.811 7048 | 248 | 9.930 0489 | 426   | 0.069 9511 | 9.881 6559 | 179 | 40 |    |
| 7 173.6 | 30 | 0.811 7296 | 247 | 9.930 0916 | 426   | 0.069 9084 | 9.881 6380 | 179 | 30 |    |
| 8 198.4 | 40 | 0.811 7543 | 247 | 9.930 1342 | 427   | 0.069 8658 | 9.881 6201 | 180 | 20 |    |
| 9 223.2 | 50 | 0.811 7790 | 248 | 9.930 1769 | 426   | 0.069 8231 | 9.881 6021 | 179 | 10 |    |
| 247     | 25 | 0.811 8038 | 247 | 9.930 2195 | 427   | 0.069 7805 | 9.881 5842 | 179 | 0  | 35 |
| 1 24.7  | 10 | 0.811 8285 | 247 | 9.930 2622 | 427   | 0.069 7378 | 9.881 5663 | 180 | 50 |    |
| 2 49.4  | 20 | 0.811 8532 | 247 | 9.930 3049 | 426   | 0.069 6951 | 9.881 5483 | 179 | 40 |    |
| 3 74.1  | 30 | 0.811 8779 | 247 | 9.930 3475 | 427   | 0.069 6525 | 9.881 5304 | 179 | 30 |    |
| 4 98.8  | 40 | 0.811 9026 | 247 | 9.930 3902 | 426   | 0.069 6098 | 9.881 5125 | 179 | 20 |    |
| 5 123.5 | 50 | 0.811 9273 | 248 | 9.930 4328 | 427   | 0.069 5672 | 9.881 4945 | 179 | 10 |    |
| 6 148.2 | 26 | 0.811 9521 | 247 | 9.930 4755 | 426   | 0.069 5245 | 9.881 4766 | 179 | 0  | 34 |
| 7 172.9 | 10 | 0.811 9768 | 247 | 9.930 5181 | 427   | 0.069 4819 | 9.881 4587 | 180 | 50 |    |
| 8 197.6 | 20 | 0.812 0015 | 247 | 9.930 5608 | 427   | 0.069 4392 | 9.881 4407 | 179 | 40 |    |
| 9 222.3 | 30 | 0.812 0262 | 247 | 9.930 6034 | 426   | 0.069 3966 | 9.881 4228 | 179 | 30 |    |
| 178     | 40 | 0.812 0509 | 247 | 9.930 6461 | 426   | 0.069 3539 | 9.881 4048 | 179 | 20 |    |
| 1 17.8  | 50 | 0.812 0756 | 247 | 9.930 6887 | 427   | 0.069 3113 | 9.881 3869 | 180 | 10 |    |
| 2 35.6  | 27 | 0.812 1003 | 247 | 9.930 7314 | 427   | 0.069 2686 | 9.881 3689 | 179 | 0  | 33 |
| 3 53.4  | 10 | 0.812 1250 | 247 | 9.930 7740 | 427   | 0.069 2260 | 9.881 3510 | 180 | 50 |    |
| 4 71.2  | 20 | 0.812 1497 | 247 | 9.930 8167 | 427   | 0.069 1833 | 9.881 3330 | 179 | 40 |    |
| 5 89.0  | 30 | 0.812 1744 | 246 | 9.930 8593 | 426   | 0.069 1407 | 9.881 3151 | 180 | 30 |    |
| 6 106.8 | 40 | 0.812 1990 | 247 | 9.930 9019 | 427   | 0.069 0981 | 9.881 2971 | 180 | 20 |    |
| 7 124.6 | 50 | 0.812 2237 | 247 | 9.930 9446 | 426   | 0.069 0554 | 9.881 2791 | 179 | 10 |    |
| 8 142.4 | 28 | 0.812 2484 | 247 | 9.930 9872 | 427   | 0.069 0128 | 9.881 2612 | 180 | 0  | 32 |
| 9 160.2 | 10 | 0.812 2731 | 247 | 9.931 0299 | 426   | 0.068 9701 | 9.881 2432 | 179 | 50 |    |
| 179     | 20 | 0.812 2978 | 246 | 9.931 0725 | 427   | 0.068 9275 | 9.881 2253 | 180 | 40 |    |
| 1 17.9  | 30 | 0.812 3224 | 247 | 9.931 1152 | 426   | 0.068 8848 | 9.881 2073 | 180 | 30 |    |
| 2 35.8  | 40 | 0.812 3471 | 247 | 9.931 1578 | 426   | 0.068 8422 | 9.881 1893 | 179 | 20 |    |
| 3 53.7  | 50 | 0.812 3718 | 247 | 9.931 2004 | 427   | 0.068 7996 | 9.881 1714 | 180 | 10 |    |
| 4 71.6  | 29 | 0.812 3965 | 246 | 9.931 2431 | 426   | 0.068 7569 | 9.881 1534 | 180 | 0  | 31 |
| 5 89.5  | 10 | 0.812 4211 | 247 | 9.931 2857 | 427   | 0.068 7143 | 9.881 1354 | 180 | 50 |    |
| 6 107.4 | 20 | 0.812 4458 | 246 | 9.931 3284 | 426   | 0.068 6716 | 9.881 1174 | 179 | 40 |    |
| 7 125.3 | 30 | 0.812 4704 | 247 | 9.931 3710 | 426   | 0.068 6290 | 9.881 0995 | 180 | 30 |    |
| 8 143.2 | 40 | 0.812 4951 | 247 | 9.931 4136 | 427   | 0.068 5864 | 9.881 0815 | 180 | 20 |    |
| 9 161.1 | 50 | 0.812 5198 | 246 | 9.931 4563 | 426   | 0.068 5437 | 9.881 0635 | 180 | 10 |    |
|         | 30 | 0.812 5444 |     | 9.931 4989 |       | 0.068 5011 | 9.881 0455 |     | 0  | 30 |
|         |    | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d.  |    |    |



|    |    | Sn         | d.  | Tang       | d. c. | Cotg       | Coa        | d.  |    |    |
|----|----|------------|-----|------------|-------|------------|------------|-----|----|----|
| 30 | 0  | 9.812 5444 | 247 | 9.931 4989 | 426   | 0.068 5011 | 9.881 0455 | 180 | 0  | 30 |
|    | 10 | 9.812 5691 | 246 | 9.931 5415 | 427   | 0.068 4585 | 9.881 0275 | 180 | 50 |    |
|    | 20 | 9.812 5937 | 247 | 9.931 5842 | 426   | 0.068 4158 | 9.881 0095 | 179 | 40 |    |
|    | 30 | 9.812 6184 | 246 | 9.931 6268 | 426   | 0.068 3732 | 9.880 9916 | 180 | 30 |    |
|    | 40 | 9.812 6430 | 246 | 9.931 6694 | 427   | 0.068 3306 | 9.880 9736 | 180 | 20 |    |
|    | 50 | 9.812 6676 | 247 | 9.931 7121 | 426   | 0.068 2879 | 9.880 9556 | 180 | 10 |    |
| 31 | 0  | 9.812 6923 | 246 | 9.931 7547 | 426   | 0.068 2453 | 9.880 9376 | 180 | 0  | 29 |
|    | 10 | 9.812 7169 | 247 | 9.931 7973 | 427   | 0.068 2027 | 9.880 9196 | 180 | 50 |    |
|    | 20 | 9.812 7416 | 246 | 9.931 8400 | 426   | 0.068 1600 | 9.880 9016 | 180 | 40 |    |
|    | 30 | 9.812 7662 | 246 | 9.931 8826 | 426   | 0.068 1174 | 9.880 8836 | 180 | 30 |    |
|    | 40 | 9.812 7908 | 246 | 9.931 9252 | 426   | 0.068 0748 | 9.880 8656 | 180 | 20 |    |
|    | 50 | 9.812 8154 | 247 | 9.931 9678 | 427   | 0.068 0322 | 9.880 8476 | 180 | 10 |    |
| 32 | 0  | 9.812 8401 | 246 | 9.932 0105 | 426   | 0.067 9895 | 9.880 8296 | 180 | 0  | 28 |
|    | 10 | 9.812 8647 | 246 | 9.932 0531 | 426   | 0.067 9469 | 9.880 8116 | 180 | 50 |    |
|    | 20 | 9.812 8893 | 246 | 9.932 0957 | 426   | 0.067 9043 | 9.880 7936 | 180 | 40 |    |
|    | 30 | 9.812 9139 | 246 | 9.932 1384 | 427   | 0.067 8616 | 9.880 7756 | 180 | 30 |    |
|    | 40 | 9.812 9385 | 247 | 9.932 1810 | 426   | 0.067 8190 | 9.880 7576 | 180 | 20 |    |
|    | 50 | 9.812 9632 | 246 | 9.932 2236 | 426   | 0.067 7764 | 9.880 7396 | 181 | 10 |    |
| 33 | 0  | 9.812 9878 | 246 | 9.932 2662 | 427   | 0.067 7338 | 9.880 7215 | 180 | 0  | 27 |
|    | 10 | 9.813 0124 | 246 | 9.932 3089 | 426   | 0.067 6911 | 9.880 7035 | 180 | 50 |    |
|    | 20 | 9.813 0370 | 246 | 9.932 3515 | 426   | 0.067 6485 | 9.880 6855 | 180 | 40 |    |
|    | 30 | 9.813 0616 | 246 | 9.932 3941 | 426   | 0.067 6059 | 9.880 6675 | 180 | 30 |    |
|    | 40 | 9.813 0862 | 246 | 9.932 4367 | 426   | 0.067 5633 | 9.880 6495 | 181 | 20 |    |
|    | 50 | 9.813 1108 | 246 | 9.932 4793 | 427   | 0.067 5207 | 9.880 6314 | 180 | 10 |    |
| 34 | 0  | 9.813 1354 | 246 | 9.932 5220 | 426   | 0.067 4780 | 9.880 6134 | 180 | 0  | 26 |
|    | 10 | 9.813 1600 | 246 | 9.932 5646 | 426   | 0.067 4354 | 9.880 5954 | 180 | 50 |    |
|    | 20 | 9.813 1846 | 246 | 9.932 6072 | 426   | 0.067 3928 | 9.880 5774 | 181 | 40 |    |
|    | 30 | 9.813 2092 | 245 | 9.932 6498 | 426   | 0.067 3502 | 9.880 5593 | 180 | 30 |    |
|    | 40 | 9.813 2337 | 246 | 9.932 6924 | 426   | 0.067 3076 | 9.880 5413 | 180 | 20 |    |
|    | 50 | 9.813 2583 | 246 | 9.932 7351 | 427   | 0.067 2649 | 9.880 5233 | 181 | 10 |    |
| 35 | 0  | 9.813 2829 | 246 | 9.932 7777 | 426   | 0.067 2223 | 9.880 5052 | 180 | 0  | 25 |
|    | 10 | 9.813 3075 | 246 | 9.932 8203 | 426   | 0.067 1797 | 9.880 4872 | 180 | 50 |    |
|    | 20 | 9.813 3321 | 245 | 9.932 8629 | 426   | 0.067 1371 | 9.880 4692 | 181 | 40 |    |
|    | 30 | 9.813 3566 | 246 | 9.932 9055 | 426   | 0.067 0945 | 9.880 4511 | 180 | 30 |    |
|    | 40 | 9.813 3812 | 246 | 9.932 9481 | 426   | 0.067 0519 | 9.880 4331 | 181 | 20 |    |
|    | 50 | 9.813 4058 | 245 | 9.932 9907 | 427   | 0.067 0093 | 9.880 4150 | 180 | 10 |    |
| 36 | 0  | 9.813 4303 | 246 | 9.933 0334 | 426   | 0.066 9666 | 9.880 3970 | 181 | 0  | 24 |
|    | 10 | 9.813 4549 | 246 | 9.933 0760 | 426   | 0.066 9240 | 9.880 3790 | 180 | 50 |    |
|    | 20 | 9.813 4795 | 245 | 9.933 1186 | 426   | 0.066 8814 | 9.880 3609 | 181 | 40 |    |
|    | 30 | 9.813 5040 | 246 | 9.933 1612 | 426   | 0.066 8388 | 9.880 3428 | 180 | 30 |    |
|    | 40 | 9.813 5286 | 245 | 9.933 2038 | 426   | 0.066 7962 | 9.880 3248 | 181 | 20 |    |
|    | 50 | 9.813 5531 | 246 | 9.933 2464 | 426   | 0.066 7536 | 9.880 3067 | 180 | 10 |    |
| 37 | 0  | 9.813 5777 | 245 | 9.933 2890 | 426   | 0.066 7110 | 9.880 2887 | 181 | 0  | 23 |
|    | 10 | 9.813 6022 | 246 | 9.933 3316 | 426   | 0.066 6684 | 9.880 2706 | 180 | 50 |    |
|    | 20 | 9.813 6268 | 245 | 9.933 3742 | 426   | 0.066 6258 | 9.880 2526 | 181 | 40 |    |
|    | 30 | 9.813 6513 | 246 | 9.933 4168 | 426   | 0.066 5832 | 9.880 2345 | 181 | 30 |    |
|    | 40 | 9.813 6759 | 245 | 9.933 4594 | 426   | 0.066 5406 | 9.880 2164 | 180 | 20 |    |
|    | 50 | 9.813 7004 | 246 | 9.933 5020 | 426   | 0.066 4980 | 9.880 1984 | 181 | 10 |    |
| 38 | 0  | 9.813 7250 | 245 | 9.933 5446 | 427   | 0.066 4554 | 9.880 1803 | 181 | 0  | 22 |
|    | 10 | 9.813 7495 | 245 | 9.933 5873 | 426   | 0.066 4127 | 9.880 1622 | 180 | 50 |    |
|    | 20 | 9.813 7740 | 246 | 9.933 6299 | 426   | 0.066 3701 | 9.880 1442 | 181 | 40 |    |
|    | 30 | 9.813 7986 | 245 | 9.933 6725 | 426   | 0.066 3275 | 9.880 1261 | 181 | 30 |    |
|    | 40 | 9.813 8231 | 245 | 9.933 7151 | 426   | 0.066 2849 | 9.880 1080 | 181 | 20 |    |
|    | 50 | 9.813 8476 | 245 | 9.933 7577 | 426   | 0.066 2423 | 9.880 0899 | 180 | 10 |    |
| 39 | 0  | 9.813 8721 | 245 | 9.933 8003 | 426   | 0.066 1997 | 9.880 0719 | 181 | 0  | 21 |
|    | 10 | 9.813 8966 | 246 | 9.933 8429 | 426   | 0.066 1571 | 9.880 0538 | 181 | 50 |    |
|    | 20 | 9.813 9212 | 245 | 9.933 8855 | 426   | 0.066 1145 | 9.880 0357 | 181 | 40 |    |
|    | 30 | 9.813 9457 | 245 | 9.933 9281 | 426   | 0.066 0719 | 9.880 0176 | 181 | 30 |    |
|    | 40 | 9.813 9702 | 245 | 9.933 9707 | 426   | 0.066 0293 | 9.879 9995 | 180 | 20 |    |
|    | 50 | 9.813 9947 | 245 | 9.934 0133 | 426   | 0.065 9867 | 9.879 9815 | 181 | 10 |    |
| 40 | 0  | 9.814 0192 | 245 | 9.934 0559 | 426   | 0.065 9441 | 9.879 9634 | 181 | 0  | 20 |
|    |    | Coa        | d.  | Cotg       | d. c. | Tang       | Sin        | d.  |    |    |

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|    | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d.  | "  |    |
|----|----|------------|-----|------------|-------|------------|------------|-----|----|----|
| 40 | 0  | 9.814 0192 | 245 | 9.934 0559 | 426   | 0.065 9441 | 9.879 9634 | 181 | 0  | 20 |
|    | 10 | 9.814 0437 | 245 | 9.934 0985 | 425   | 0.065 9015 | 9.879 9453 | 181 | 50 |    |
|    | 20 | 9.814 0682 | 245 | 9.934 1410 | 426   | 0.065 8590 | 9.879 9272 | 181 | 40 |    |
|    | 30 | 9.814 0927 | 245 | 9.934 1836 | 426   | 0.065 8164 | 9.879 9091 | 181 | 30 |    |
|    | 40 | 9.814 1172 | 245 | 9.934 2262 | 426   | 0.065 7738 | 9.879 8910 | 181 | 20 |    |
|    | 50 | 9.814 1417 | 245 | 9.934 2688 | 426   | 0.065 7312 | 9.879 8729 | 181 | 10 |    |
| 41 | 0  | 9.814 1662 | 245 | 9.934 3114 | 426   | 0.065 6886 | 9.879 8548 | 181 | 0  | 19 |
|    | 10 | 9.814 1907 | 245 | 9.934 3540 | 426   | 0.065 6460 | 9.879 8367 | 181 | 50 |    |
|    | 20 | 9.814 2152 | 245 | 9.934 3966 | 426   | 0.065 6034 | 9.879 8186 | 181 | 40 |    |
|    | 30 | 9.814 2397 | 245 | 9.934 4392 | 426   | 0.065 5608 | 9.879 8005 | 181 | 30 |    |
|    | 40 | 9.814 2642 | 245 | 9.934 4818 | 426   | 0.065 5182 | 9.879 7824 | 181 | 20 |    |
|    | 50 | 9.814 2887 | 245 | 9.934 5244 | 426   | 0.065 4756 | 9.879 7643 | 181 | 10 |    |
| 42 | 0  | 9.814 3132 | 245 | 9.934 5670 | 426   | 0.065 4330 | 9.879 7462 | 181 | 0  | 18 |
|    | 10 | 9.814 3376 | 245 | 9.934 6096 | 425   | 0.065 3904 | 9.879 7281 | 182 | 50 |    |
|    | 20 | 9.814 3621 | 245 | 9.934 6521 | 426   | 0.065 3479 | 9.879 7099 | 181 | 40 |    |
|    | 30 | 9.814 3866 | 244 | 9.934 6947 | 426   | 0.065 3053 | 9.879 6918 | 181 | 30 |    |
|    | 40 | 9.814 4110 | 244 | 9.934 7373 | 426   | 0.065 2627 | 9.879 6737 | 181 | 20 |    |
|    | 50 | 9.814 4355 | 245 | 9.934 7799 | 426   | 0.065 2201 | 9.879 6556 | 181 | 10 |    |
| 43 | 0  | 9.814 4600 | 244 | 9.934 8225 | 426   | 0.065 1775 | 9.879 6375 | 181 | 0  | 17 |
|    | 10 | 9.814 4844 | 245 | 9.934 8651 | 426   | 0.065 1349 | 9.879 6194 | 182 | 50 |    |
|    | 20 | 9.814 5089 | 245 | 9.934 9077 | 425   | 0.065 0923 | 9.879 6012 | 181 | 40 |    |
|    | 30 | 9.814 5334 | 244 | 9.934 9502 | 425   | 0.065 0498 | 9.879 5831 | 181 | 30 |    |
|    | 40 | 9.814 5578 | 244 | 9.934 9928 | 426   | 0.065 0072 | 9.879 5650 | 182 | 20 |    |
|    | 50 | 9.814 5823 | 245 | 9.935 0354 | 426   | 0.064 9646 | 9.879 5468 | 181 | 10 |    |
| 44 | 0  | 9.814 6067 | 245 | 9.935 0780 | 426   | 0.064 9220 | 9.879 5287 | 181 | 0  | 16 |
|    | 10 | 9.814 6312 | 244 | 9.935 1206 | 426   | 0.064 8794 | 9.879 5106 | 182 | 50 |    |
|    | 20 | 9.814 6556 | 244 | 9.935 1632 | 425   | 0.064 8368 | 9.879 4924 | 181 | 40 |    |
|    | 30 | 9.814 6801 | 244 | 9.935 2057 | 425   | 0.064 7943 | 9.879 4743 | 181 | 30 |    |
|    | 40 | 9.814 7045 | 244 | 9.935 2483 | 426   | 0.064 7517 | 9.879 4562 | 182 | 20 |    |
|    | 50 | 9.814 7289 | 245 | 9.935 2909 | 426   | 0.064 7091 | 9.879 4380 | 181 | 10 |    |
| 45 | 0  | 9.814 7534 | 244 | 9.935 3335 | 426   | 0.064 6665 | 9.879 4199 | 182 | 0  | 15 |
|    | 10 | 9.814 7778 | 244 | 9.935 3761 | 425   | 0.064 6239 | 9.879 4017 | 181 | 50 |    |
|    | 20 | 9.814 8022 | 245 | 9.935 4186 | 426   | 0.064 5814 | 9.879 3836 | 181 | 40 |    |
|    | 30 | 9.814 8267 | 244 | 9.935 4612 | 426   | 0.064 5388 | 9.879 3655 | 181 | 30 |    |
|    | 40 | 9.814 8511 | 244 | 9.935 5038 | 426   | 0.064 4962 | 9.879 3473 | 182 | 20 |    |
|    | 50 | 9.814 8755 | 244 | 9.935 5464 | 425   | 0.064 4536 | 9.879 3292 | 182 | 10 |    |
| 46 | 0  | 9.814 8999 | 245 | 9.935 5889 | 426   | 0.064 4111 | 9.879 3110 | 181 | 0  | 14 |
|    | 10 | 9.814 9244 | 244 | 9.935 6315 | 426   | 0.064 3685 | 9.879 2929 | 182 | 50 |    |
|    | 20 | 9.814 9488 | 244 | 9.935 6741 | 426   | 0.064 3259 | 9.879 2747 | 182 | 40 |    |
|    | 30 | 9.814 9732 | 244 | 9.935 7167 | 425   | 0.064 2833 | 9.879 2565 | 181 | 30 |    |
|    | 40 | 9.814 9976 | 244 | 9.935 7592 | 426   | 0.064 2408 | 9.879 2384 | 182 | 20 |    |
|    | 50 | 9.815 0220 | 244 | 9.935 8018 | 426   | 0.064 1982 | 9.879 2202 | 181 | 10 |    |
| 47 | 0  | 9.815 0464 | 244 | 9.935 8444 | 425   | 0.064 1556 | 9.879 2021 | 182 | 0  | 13 |
|    | 10 | 9.815 0708 | 244 | 9.935 8869 | 426   | 0.064 1131 | 9.879 1839 | 182 | 50 |    |
|    | 20 | 9.815 0952 | 244 | 9.935 9295 | 426   | 0.064 0705 | 9.879 1657 | 181 | 40 |    |
|    | 30 | 9.815 1196 | 244 | 9.935 9721 | 425   | 0.064 0279 | 9.879 1476 | 182 | 30 |    |
|    | 40 | 9.815 1440 | 244 | 9.936 0146 | 425   | 0.063 9854 | 9.879 1294 | 182 | 20 |    |
|    | 50 | 9.815 1684 | 244 | 9.936 0572 | 426   | 0.063 9428 | 9.879 1112 | 182 | 10 |    |
| 48 | 0  | 9.815 1928 | 244 | 9.936 0998 | 425   | 0.063 9002 | 9.879 0930 | 181 | 0  | 12 |
|    | 10 | 9.815 2172 | 244 | 9.936 1423 | 426   | 0.063 8577 | 9.879 0749 | 182 | 50 |    |
|    | 20 | 9.815 2416 | 244 | 9.936 1849 | 426   | 0.063 8151 | 9.879 0567 | 182 | 40 |    |
|    | 30 | 9.815 2660 | 244 | 9.936 2275 | 425   | 0.063 7725 | 9.879 0385 | 182 | 30 |    |
|    | 40 | 9.815 2904 | 244 | 9.936 2700 | 425   | 0.063 7300 | 9.879 0203 | 182 | 20 |    |
|    | 50 | 9.815 3148 | 243 | 9.936 3126 | 426   | 0.063 6874 | 9.879 0021 | 181 | 10 |    |
| 49 | 0  | 9.815 3391 | 244 | 9.936 3552 | 425   | 0.063 6448 | 9.878 9840 | 182 | 0  | 11 |
|    | 10 | 9.815 3635 | 244 | 9.936 3977 | 426   | 0.063 6023 | 9.878 9658 | 182 | 50 |    |
|    | 20 | 9.815 3879 | 244 | 9.936 4403 | 426   | 0.063 5597 | 9.878 9476 | 182 | 40 |    |
|    | 30 | 9.815 4123 | 244 | 9.936 4829 | 425   | 0.063 5171 | 9.878 9294 | 182 | 30 |    |
|    | 40 | 9.815 4366 | 243 | 9.936 5254 | 425   | 0.063 4746 | 9.878 9112 | 182 | 20 |    |
|    | 50 | 9.815 4610 | 244 | 9.936 5680 | 426   | 0.063 4320 | 9.878 8930 | 182 | 10 |    |
| 50 | 0  | 9.815 4854 | 244 | 9.936 6105 | 425   | 0.063 3895 | 9.878 8748 | 182 | 0  | 10 |
|    | "  | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d.  | "  |    |



|    | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d.  | "  |    |
|----|----|------------|-----|------------|-------|------------|------------|-----|----|----|
| 50 | o  | 9.815 4854 | 243 | 9.936 6105 | 426   | 0.063 3895 | 9.878 8748 | 182 | o  | 10 |
|    | 10 | 9.815 5097 | 244 | 9.936 6531 | 426   | 0.063 3469 | 9.878 8566 | 182 | 50 |    |
|    | 20 | 9.815 5341 | 243 | 9.936 6957 | 425   | 0.063 3043 | 9.878 8384 | 182 | 40 |    |
|    | 30 | 9.815 5584 | 244 | 9.936 7382 | 426   | 0.063 2618 | 9.878 8202 | 182 | 30 |    |
|    | 40 | 9.815 5828 | 244 | 9.936 7808 | 425   | 0.063 2192 | 9.878 8020 | 182 | 20 |    |
|    | 50 | 9.815 6072 | 243 | 9.936 8233 | 426   | 0.063 1767 | 9.878 7838 | 182 | 10 |    |
| 51 | o  | 9.815 6315 | 244 | 9.936 8659 | 425   | 0.063 1341 | 9.878 7656 | 182 | o  | 9  |
|    | 10 | 9.815 6559 | 243 | 9.936 9084 | 426   | 0.063 0916 | 9.878 7474 | 182 | 50 |    |
|    | 20 | 9.815 6802 | 243 | 9.936 9510 | 426   | 0.063 0490 | 9.878 7292 | 182 | 40 |    |
|    | 30 | 9.815 7045 | 244 | 9.936 9936 | 425   | 0.063 0064 | 9.878 7110 | 182 | 30 |    |
|    | 40 | 9.815 7289 | 243 | 9.937 0361 | 426   | 0.062 9639 | 9.878 6928 | 182 | 20 |    |
|    | 50 | 9.815 7532 | 244 | 9.937 0787 | 425   | 0.062 9213 | 9.878 6746 | 183 | 10 |    |
| 52 | o  | 9.815 7776 | 243 | 9.937 1212 | 426   | 0.062 8788 | 9.878 6563 | 182 | o  | 8  |
|    | 10 | 9.815 8019 | 243 | 9.937 1638 | 425   | 0.062 8362 | 9.878 6381 | 182 | 50 |    |
|    | 20 | 9.815 8262 | 244 | 9.937 2063 | 426   | 0.062 7937 | 9.878 6199 | 182 | 40 |    |
|    | 30 | 9.815 8506 | 244 | 9.937 2489 | 425   | 0.062 7511 | 9.878 6017 | 182 | 30 |    |
|    | 40 | 9.815 8749 | 243 | 9.937 2914 | 426   | 0.062 7086 | 9.878 5835 | 183 | 20 |    |
|    | 50 | 9.815 8992 | 243 | 9.937 3340 | 425   | 0.062 6660 | 9.878 5652 | 182 | 10 |    |
| 53 | o  | 9.815 9235 | 244 | 9.937 3765 | 426   | 0.062 6235 | 9.878 5470 | 182 | o  | 7  |
|    | 10 | 9.815 9479 | 243 | 9.937 4191 | 425   | 0.062 5809 | 9.878 5288 | 182 | 50 |    |
|    | 20 | 9.815 9722 | 243 | 9.937 4616 | 426   | 0.062 5384 | 9.878 5106 | 183 | 40 |    |
|    | 30 | 9.815 9965 | 243 | 9.937 5042 | 425   | 0.062 4958 | 9.878 4923 | 182 | 30 |    |
|    | 40 | 9.816 0208 | 243 | 9.937 5467 | 426   | 0.062 4533 | 9.878 4741 | 183 | 20 |    |
|    | 50 | 9.816 0451 | 243 | 9.937 5893 | 425   | 0.062 4107 | 9.878 4558 | 182 | 10 |    |
| 54 | o  | 9.816 0694 | 243 | 9.937 6318 | 425   | 0.062 3682 | 9.878 4376 | 182 | o  | 6  |
|    | 10 | 9.816 0937 | 243 | 9.937 6743 | 426   | 0.062 3257 | 9.878 4194 | 183 | 50 |    |
|    | 20 | 9.816 1180 | 243 | 9.937 7169 | 425   | 0.062 2831 | 9.878 4011 | 182 | 40 |    |
|    | 30 | 9.816 1423 | 243 | 9.937 7594 | 426   | 0.062 2406 | 9.878 3829 | 183 | 30 |    |
|    | 40 | 9.816 1666 | 243 | 9.937 8020 | 425   | 0.062 1980 | 9.878 3646 | 182 | 20 |    |
|    | 50 | 9.816 1909 | 243 | 9.937 8445 | 426   | 0.062 1555 | 9.878 3464 | 183 | 10 |    |
| 55 | o  | 9.816 2152 | 243 | 9.937 8871 | 425   | 0.062 1129 | 9.878 3281 | 182 | o  | 5  |
|    | 10 | 9.816 2395 | 243 | 9.937 9296 | 425   | 0.062 0704 | 9.878 3099 | 183 | 50 |    |
|    | 20 | 9.816 2638 | 243 | 9.937 9721 | 426   | 0.062 0279 | 9.878 2916 | 182 | 40 |    |
|    | 30 | 9.816 2881 | 243 | 9.938 0147 | 425   | 0.061 9853 | 9.878 2734 | 183 | 30 |    |
|    | 40 | 9.816 3124 | 242 | 9.938 0572 | 426   | 0.061 9428 | 9.878 2551 | 182 | 20 |    |
|    | 50 | 9.816 3366 | 243 | 9.938 0998 | 425   | 0.061 9002 | 9.878 2369 | 183 | 10 |    |
| 56 | o  | 9.816 3609 | 243 | 9.938 1423 | 425   | 0.061 8577 | 9.878 2186 | 182 | o  | 4  |
|    | 10 | 9.816 3852 | 243 | 9.938 1848 | 426   | 0.061 8152 | 9.878 2004 | 183 | 50 |    |
|    | 20 | 9.816 4095 | 242 | 9.938 2274 | 425   | 0.061 7726 | 9.878 1821 | 183 | 40 |    |
|    | 30 | 9.816 4337 | 243 | 9.938 2699 | 426   | 0.061 7301 | 9.878 1638 | 182 | 30 |    |
|    | 40 | 9.816 4580 | 243 | 9.938 3125 | 425   | 0.061 6875 | 9.878 1456 | 183 | 20 |    |
|    | 50 | 9.816 4823 | 243 | 9.938 3550 | 425   | 0.061 6450 | 9.878 1273 | 183 | 10 |    |
| 57 | o  | 9.816 5066 | 242 | 9.938 3975 | 426   | 0.061 6025 | 9.878 1090 | 182 | o  | 3  |
|    | 10 | 9.816 5308 | 243 | 9.938 4401 | 425   | 0.061 5599 | 9.878 0908 | 183 | 50 |    |
|    | 20 | 9.816 5551 | 242 | 9.938 4826 | 425   | 0.061 5174 | 9.878 0725 | 183 | 40 |    |
|    | 30 | 9.816 5793 | 243 | 9.938 5251 | 426   | 0.061 4749 | 9.878 0542 | 183 | 30 |    |
|    | 40 | 9.816 6036 | 242 | 9.938 5677 | 425   | 0.061 4323 | 9.878 0359 | 182 | 20 |    |
|    | 50 | 9.816 6278 | 243 | 9.938 6102 | 425   | 0.061 3898 | 9.878 0177 | 183 | 10 |    |
| 58 | o  | 9.816 6521 | 242 | 9.938 6527 | 426   | 0.061 3473 | 9.877 9994 | 183 | o  | 2  |
|    | 10 | 9.816 6763 | 243 | 9.938 6953 | 425   | 0.061 3047 | 9.877 9811 | 183 | 50 |    |
|    | 20 | 9.816 7006 | 242 | 9.938 7378 | 425   | 0.061 2622 | 9.877 9628 | 183 | 40 |    |
|    | 30 | 9.816 7248 | 243 | 9.938 7803 | 425   | 0.061 2197 | 9.877 9445 | 183 | 30 |    |
|    | 40 | 9.816 7491 | 242 | 9.938 8228 | 426   | 0.061 1772 | 9.877 9262 | 182 | 20 |    |
|    | 50 | 9.816 7733 | 242 | 9.938 8654 | 425   | 0.061 1346 | 9.877 9079 | 183 | 10 |    |
| 59 | o  | 9.816 7975 | 243 | 9.938 9079 | 425   | 0.061 0921 | 9.877 8896 | 182 | o  | 1  |
|    | 10 | 9.816 8218 | 242 | 9.938 9504 | 426   | 0.061 0496 | 9.877 8714 | 182 | 50 |    |
|    | 20 | 9.816 8460 | 242 | 9.938 9930 | 425   | 0.061 0070 | 9.877 8531 | 183 | 40 |    |
|    | 30 | 9.816 8702 | 243 | 9.939 0355 | 425   | 0.060 9645 | 9.877 8348 | 183 | 30 |    |
|    | 40 | 9.816 8945 | 242 | 9.939 0780 | 425   | 0.060 9220 | 9.877 8165 | 183 | 20 |    |
|    | 50 | 9.816 9187 | 242 | 9.939 1205 | 426   | 0.060 8795 | 9.877 7982 | 183 | 10 |    |
| 60 | o  | 9.816 9429 | 242 | 9.939 1631 | 426   | 0.060 8369 | 9.877 7799 | 183 | o  | 0  |
|    |    |            |     |            |       |            |            |     |    |    |
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[illegible]



|    | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d.  | "  |    |
|----|----|------------|-----|------------|-------|------------|------------|-----|----|----|
| 10 | 0  | 9.818 3919 | 241 | 9.941 7135 | 425   | 0.058 2865 | 9.876 6785 | 185 | 0  | 50 |
|    | 10 | 9.818 4160 | 241 | 9.941 7560 | 425   | 0.058 2440 | 9.876 6600 | 184 | 50 |    |
|    | 20 | 9.818 4401 | 241 | 9.941 7985 | 425   | 0.058 2015 | 9.876 6416 | 184 | 40 |    |
|    | 30 | 9.818 4642 | 241 | 9.941 8409 | 424   | 0.058 1591 | 9.876 6232 | 184 | 30 |    |
|    | 40 | 9.818 4882 | 240 | 9.941 8834 | 425   | 0.058 1166 | 9.876 6048 | 184 | 20 |    |
|    | 50 | 9.818 5123 | 241 | 9.941 9259 | 425   | 0.058 0741 | 9.876 5864 | 184 | 10 |    |
| 11 | 0  | 9.818 5364 | 240 | 9.941 9684 | 425   | 0.058 0316 | 9.876 5680 | 185 | 0  | 49 |
|    | 10 | 9.818 5604 | 241 | 9.942 0109 | 425   | 0.057 9891 | 9.876 5495 | 184 | 50 |    |
|    | 20 | 9.818 5845 | 241 | 9.942 0534 | 425   | 0.057 9466 | 9.876 5311 | 184 | 40 |    |
|    | 30 | 9.818 6086 | 240 | 9.942 0959 | 425   | 0.057 9041 | 9.876 5127 | 184 | 30 |    |
|    | 40 | 9.818 6326 | 241 | 9.942 1384 | 424   | 0.057 8616 | 9.876 4943 | 185 | 20 |    |
|    | 50 | 9.818 6567 | 240 | 9.942 1808 | 425   | 0.057 8192 | 9.876 4758 | 184 | 10 |    |
| 12 | 0  | 9.818 6807 | 241 | 9.942 2233 | 425   | 0.057 7767 | 9.876 4574 | 184 | 0  | 48 |
|    | 10 | 9.818 7048 | 240 | 9.942 2658 | 425   | 0.057 7342 | 9.876 4390 | 185 | 50 |    |
|    | 20 | 9.818 7288 | 241 | 9.942 3083 | 425   | 0.057 6917 | 9.876 4205 | 184 | 40 |    |
|    | 30 | 9.818 7529 | 240 | 9.942 3508 | 425   | 0.057 6492 | 9.876 4021 | 185 | 30 |    |
|    | 40 | 9.818 7769 | 240 | 9.942 3933 | 424   | 0.057 6067 | 9.876 3836 | 184 | 20 |    |
|    | 50 | 9.818 8009 | 241 | 9.942 4357 | 425   | 0.057 5643 | 9.876 3652 | 184 | 10 |    |
| 13 | 0  | 9.818 8250 | 240 | 9.942 4782 | 425   | 0.057 5218 | 9.876 3468 | 185 | 0  | 47 |
|    | 10 | 9.818 8490 | 240 | 9.942 5207 | 425   | 0.057 4793 | 9.876 3283 | 184 | 50 |    |
|    | 20 | 9.818 8730 | 241 | 9.942 5632 | 425   | 0.057 4368 | 9.876 3099 | 185 | 40 |    |
|    | 30 | 9.818 8971 | 240 | 9.942 6057 | 424   | 0.057 3943 | 9.876 2914 | 184 | 30 |    |
|    | 40 | 9.818 9211 | 240 | 9.942 6481 | 425   | 0.057 3519 | 9.876 2730 | 185 | 20 |    |
|    | 50 | 9.818 9451 | 241 | 9.942 6906 | 425   | 0.057 3094 | 9.876 2545 | 184 | 10 |    |
| 14 | 0  | 9.818 9692 | 240 | 9.942 7331 | 425   | 0.057 2669 | 9.876 2361 | 185 | 0  | 46 |
|    | 10 | 9.818 9932 | 240 | 9.942 7756 | 424   | 0.057 2244 | 9.876 2176 | 184 | 50 |    |
|    | 20 | 9.819 0172 | 240 | 9.942 8180 | 425   | 0.057 1820 | 9.876 1992 | 185 | 40 |    |
|    | 30 | 9.819 0412 | 240 | 9.942 8605 | 425   | 0.057 1395 | 9.876 1807 | 185 | 30 |    |
|    | 40 | 9.819 0652 | 240 | 9.942 9030 | 425   | 0.057 0970 | 9.876 1622 | 184 | 20 |    |
|    | 50 | 9.819 0892 | 241 | 9.942 9455 | 424   | 0.057 0545 | 9.876 1438 | 185 | 10 |    |
| 15 | 0  | 9.819 1133 | 240 | 9.942 9879 | 425   | 0.057 0121 | 9.876 1253 | 184 | 0  | 45 |
|    | 10 | 9.819 1373 | 240 | 9.943 0304 | 425   | 0.056 9696 | 9.876 1069 | 185 | 50 |    |
|    | 20 | 9.819 1613 | 240 | 9.943 0729 | 425   | 0.056 9271 | 9.876 0884 | 185 | 40 |    |
|    | 30 | 9.819 1853 | 240 | 9.943 1154 | 424   | 0.056 8846 | 9.876 0699 | 185 | 30 |    |
|    | 40 | 9.819 2093 | 240 | 9.943 1578 | 425   | 0.056 8422 | 9.876 0514 | 184 | 20 |    |
|    | 50 | 9.819 2333 | 240 | 9.943 2003 | 425   | 0.056 7997 | 9.876 0330 | 185 | 10 |    |
| 16 | 0  | 9.819 2573 | 240 | 9.943 2428 | 424   | 0.056 7572 | 9.876 0145 | 185 | 0  | 44 |
|    | 10 | 9.819 2813 | 239 | 9.943 2852 | 425   | 0.056 7148 | 9.875 9960 | 185 | 50 |    |
|    | 20 | 9.819 3052 | 240 | 9.943 3277 | 425   | 0.056 6723 | 9.875 9775 | 184 | 40 |    |
|    | 30 | 9.819 3292 | 240 | 9.943 3702 | 424   | 0.056 6298 | 9.875 9591 | 185 | 30 |    |
|    | 40 | 9.819 3532 | 240 | 9.943 4126 | 425   | 0.056 5874 | 9.875 9406 | 185 | 20 |    |
|    | 50 | 9.819 3772 | 240 | 9.943 4551 | 425   | 0.056 5449 | 9.875 9221 | 185 | 10 |    |
| 17 | 0  | 9.819 4012 | 240 | 9.943 4976 | 425   | 0.056 5024 | 9.875 9036 | 185 | 0  | 43 |
|    | 10 | 9.819 4252 | 239 | 9.943 5401 | 424   | 0.056 4599 | 9.875 8851 | 185 | 50 |    |
|    | 20 | 9.819 4491 | 240 | 9.943 5825 | 425   | 0.056 4175 | 9.875 8666 | 185 | 40 |    |
|    | 30 | 9.819 4731 | 240 | 9.943 6250 | 424   | 0.056 3750 | 9.875 8481 | 185 | 30 |    |
|    | 40 | 9.819 4971 | 240 | 9.943 6674 | 425   | 0.056 3326 | 9.875 8296 | 184 | 20 |    |
|    | 50 | 9.819 5211 | 239 | 9.943 7099 | 425   | 0.056 2901 | 9.875 8112 | 185 | 10 |    |
| 18 | 0  | 9.819 5450 | 240 | 9.943 7524 | 424   | 0.056 2476 | 9.875 7927 | 185 | 0  | 42 |
|    | 10 | 9.819 5690 | 240 | 9.943 7948 | 425   | 0.056 2052 | 9.875 7742 | 185 | 50 |    |
|    | 20 | 9.819 5930 | 239 | 9.943 8373 | 425   | 0.056 1627 | 9.875 7557 | 185 | 40 |    |
|    | 30 | 9.819 6169 | 240 | 9.943 8798 | 424   | 0.056 1202 | 9.875 7372 | 185 | 30 |    |
|    | 40 | 9.819 6409 | 240 | 9.943 9222 | 425   | 0.056 0778 | 9.875 7187 | 186 | 20 |    |
|    | 50 | 9.819 6648 | 240 | 9.943 9647 | 425   | 0.056 0353 | 9.875 7001 | 185 | 10 |    |
| 19 | 0  | 9.819 6888 | 239 | 9.944 0072 | 424   | 0.055 9928 | 9.875 6816 | 185 | 0  | 41 |
|    | 10 | 9.819 7127 | 240 | 9.944 0496 | 425   | 0.055 9504 | 9.875 6631 | 185 | 50 |    |
|    | 20 | 9.819 7367 | 239 | 9.944 0921 | 424   | 0.055 9079 | 9.875 6446 | 185 | 40 |    |
|    | 30 | 9.819 7606 | 240 | 9.944 1345 | 425   | 0.055 8655 | 9.875 6261 | 185 | 30 |    |
|    | 40 | 9.819 7846 | 239 | 9.944 1770 | 424   | 0.055 8230 | 9.875 6076 | 185 | 20 |    |
|    | 50 | 9.819 8085 | 240 | 9.944 2194 | 425   | 0.055 7806 | 9.875 5891 | 185 | 10 |    |
| 20 | 0  | 9.819 8325 | 240 | 9.944 2619 | 425   | 0.055 7381 | 9.875 5706 | 185 | 0  | 40 |
|    | "  | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d.  | "  |    |







|    | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d.  | "  |    |
|----|----|------------|-----|------------|-------|------------|------------|-----|----|----|
| 30 | 0  | 9.821 2646 | 238 | 9.946 8084 | 425   | 0.053 1916 | 9.874 4561 | 186 | 0  | 30 |
|    | 10 | 9.821 2884 | 238 | 9.946 8509 | 424   | 0.053 1491 | 9.874 4375 | 186 | 50 |    |
|    | 20 | 9.821 3122 | 238 | 9.946 8933 | 424   | 0.053 1067 | 9.874 4189 | 186 | 40 |    |
|    | 30 | 9.821 3360 | 237 | 9.946 9357 | 424   | 0.053 0643 | 9.874 4003 | 187 | 30 |    |
|    | 40 | 9.821 3597 | 238 | 9.946 9781 | 425   | 0.053 0219 | 9.874 3816 | 186 | 20 |    |
|    | 50 | 9.821 3835 | 238 | 9.947 0206 | 424   | 0.052 9794 | 9.874 3630 | 187 | 10 |    |
| 31 | 0  | 9.821 4073 | 238 | 9.947 0630 | 424   | 0.052 9370 | 9.874 3443 | 186 | 0  | 29 |
|    | 10 | 9.821 4311 | 238 | 9.947 1054 | 424   | 0.052 8946 | 9.874 3257 | 186 | 50 |    |
|    | 20 | 9.821 4549 | 238 | 9.947 1478 | 424   | 0.052 8522 | 9.874 3071 | 187 | 40 |    |
|    | 30 | 9.821 4787 | 237 | 9.947 1902 | 425   | 0.052 8098 | 9.874 2884 | 186 | 30 |    |
|    | 40 | 9.821 5024 | 238 | 9.947 2327 | 424   | 0.052 7673 | 9.874 2698 | 187 | 20 |    |
|    | 50 | 9.821 5262 | 238 | 9.947 2751 | 424   | 0.052 7249 | 9.874 2511 | 186 | 10 |    |
| 32 | 0  | 9.821 5500 | 238 | 9.947 3175 | 424   | 0.052 6825 | 9.874 2325 | 187 | 0  | 28 |
|    | 10 | 9.821 5738 | 237 | 9.947 3599 | 425   | 0.052 6401 | 9.874 2138 | 186 | 50 |    |
|    | 20 | 9.821 5975 | 238 | 9.947 4024 | 424   | 0.052 5976 | 9.874 1952 | 187 | 40 |    |
|    | 30 | 9.821 6213 | 238 | 9.947 4448 | 424   | 0.052 5552 | 9.874 1765 | 186 | 30 |    |
|    | 40 | 9.821 6451 | 237 | 9.947 4872 | 424   | 0.052 5128 | 9.874 1579 | 187 | 20 |    |
|    | 50 | 9.821 6688 | 238 | 9.947 5296 | 424   | 0.052 4704 | 9.874 1392 | 187 | 10 |    |
| 33 | 0  | 9.821 6926 | 237 | 9.947 5720 | 424   | 0.052 4280 | 9.874 1205 | 186 | 0  | 27 |
|    | 10 | 9.821 7163 | 238 | 9.947 6144 | 425   | 0.052 3856 | 9.874 1019 | 187 | 50 |    |
|    | 20 | 9.821 7401 | 237 | 9.947 6569 | 424   | 0.052 3431 | 9.874 0832 | 186 | 40 |    |
|    | 30 | 9.821 7638 | 238 | 9.947 6993 | 424   | 0.052 3007 | 9.874 0646 | 187 | 30 |    |
|    | 40 | 9.821 7876 | 237 | 9.947 7417 | 424   | 0.052 2583 | 9.874 0459 | 187 | 20 |    |
|    | 50 | 9.821 8113 | 238 | 9.947 7841 | 424   | 0.052 2159 | 9.874 0272 | 187 | 10 |    |
| 34 | 0  | 9.821 8351 | 237 | 9.947 8265 | 424   | 0.052 1735 | 9.874 0085 | 186 | 0  | 26 |
|    | 10 | 9.821 8588 | 238 | 9.947 8689 | 425   | 0.052 1311 | 9.873 9899 | 187 | 50 |    |
|    | 20 | 9.821 8825 | 237 | 9.947 9114 | 424   | 0.052 0886 | 9.873 9712 | 187 | 40 |    |
|    | 30 | 9.821 9063 | 237 | 9.947 9538 | 424   | 0.052 0462 | 9.873 9525 | 187 | 30 |    |
|    | 40 | 9.821 9300 | 238 | 9.947 9962 | 424   | 0.052 0038 | 9.873 9338 | 186 | 20 |    |
|    | 50 | 9.821 9538 | 237 | 9.948 0386 | 424   | 0.051 9614 | 9.873 9152 | 187 | 10 |    |
| 35 | 0  | 9.821 9775 | 237 | 9.948 0810 | 424   | 0.051 9190 | 9.873 8965 | 187 | 0  | 25 |
|    | 10 | 9.822 0012 | 237 | 9.948 1234 | 424   | 0.051 8766 | 9.873 8778 | 187 | 50 |    |
|    | 20 | 9.822 0249 | 238 | 9.948 1658 | 424   | 0.051 8342 | 9.873 8591 | 187 | 40 |    |
|    | 30 | 9.822 0487 | 237 | 9.948 2082 | 424   | 0.051 7918 | 9.873 8404 | 187 | 30 |    |
|    | 40 | 9.822 0724 | 237 | 9.948 2506 | 425   | 0.051 7494 | 9.873 8217 | 187 | 20 |    |
|    | 50 | 9.822 0961 | 237 | 9.948 2931 | 424   | 0.051 7069 | 9.873 8030 | 186 | 10 |    |
| 36 | 0  | 9.822 1198 | 237 | 9.948 3355 | 424   | 0.051 6645 | 9.873 7844 | 187 | 0  | 24 |
|    | 10 | 9.822 1435 | 237 | 9.948 3779 | 424   | 0.051 6221 | 9.873 7657 | 187 | 50 |    |
|    | 20 | 9.822 1672 | 238 | 9.948 4203 | 424   | 0.051 5797 | 9.873 7470 | 187 | 40 |    |
|    | 30 | 9.822 1910 | 237 | 9.948 4627 | 424   | 0.051 5373 | 9.873 7283 | 187 | 30 |    |
|    | 40 | 9.822 2147 | 237 | 9.948 5051 | 424   | 0.051 4949 | 9.873 7096 | 187 | 20 |    |
|    | 50 | 9.822 2384 | 237 | 9.948 5475 | 424   | 0.051 4525 | 9.873 6909 | 187 | 10 |    |
| 37 | 0  | 9.822 2621 | 237 | 9.948 5899 | 424   | 0.051 4101 | 9.873 6722 | 187 | 0  | 23 |
|    | 10 | 9.822 2858 | 237 | 9.948 6323 | 424   | 0.051 3677 | 9.873 6535 | 188 | 50 |    |
|    | 20 | 9.822 3095 | 237 | 9.948 6747 | 424   | 0.051 3253 | 9.873 6347 | 187 | 40 |    |
|    | 30 | 9.822 3332 | 237 | 9.948 7171 | 424   | 0.051 2829 | 9.873 6160 | 187 | 30 |    |
|    | 40 | 9.822 3569 | 236 | 9.948 7595 | 424   | 0.051 2405 | 9.873 5973 | 187 | 20 |    |
|    | 50 | 9.822 3805 | 237 | 9.948 8019 | 424   | 0.051 1981 | 9.873 5786 | 187 | 10 |    |
| 38 | 0  | 9.822 4042 | 237 | 9.948 8443 | 424   | 0.051 1557 | 9.873 5599 | 187 | 0  | 22 |
|    | 10 | 9.822 4279 | 237 | 9.948 8867 | 424   | 0.051 1133 | 9.873 5412 | 187 | 50 |    |
|    | 20 | 9.822 4516 | 237 | 9.948 9291 | 424   | 0.051 0709 | 9.873 5225 | 188 | 40 |    |
|    | 30 | 9.822 4753 | 237 | 9.948 9715 | 424   | 0.051 0285 | 9.873 5037 | 187 | 30 |    |
|    | 40 | 9.822 4990 | 236 | 9.949 0139 | 424   | 0.050 9861 | 9.873 4850 | 187 | 20 |    |
|    | 50 | 9.822 5226 | 237 | 9.949 0563 | 424   | 0.050 9437 | 9.873 4663 | 187 | 10 |    |
| 39 | 0  | 9.822 5463 | 237 | 9.949 0987 | 424   | 0.050 9013 | 9.873 4476 | 188 | 0  | 21 |
|    | 10 | 9.822 5700 | 237 | 9.949 1411 | 424   | 0.050 8589 | 9.873 4288 | 187 | 50 |    |
|    | 20 | 9.822 5937 | 236 | 9.949 1835 | 424   | 0.050 8165 | 9.873 4101 | 187 | 40 |    |
|    | 30 | 9.822 6173 | 237 | 9.949 2259 | 424   | 0.050 7741 | 9.873 3914 | 188 | 30 |    |
|    | 40 | 9.822 6410 | 236 | 9.949 2683 | 424   | 0.050 7317 | 9.873 3726 | 187 | 20 |    |
|    | 50 | 9.822 6646 | 237 | 9.949 3107 | 424   | 0.050 6893 | 9.873 3539 | 187 | 10 |    |
| 40 | 0  | 9.822 6883 | 237 | 9.949 3531 | 424   | 0.050 6469 | 9.873 3352 | 187 | 0  | 20 |

425

1) 42.5

2) 85.0

3) 127.5

4) 170.0

5) 212.5

6) 255.0

7) 297.5

8) 340.0

9) 382.5

424

1) 42.4

2) 84.8

3) 127.2

4) 169.6

5) 212.0

6) 254.4

7) 296.8

8) 339.2

9) 381.6

237

1) 23.7

2) 47.4

3) 71.1

4) 94.8

5) 118.5

6) 142.2

7) 165.9

8) 189.6

9) 213.3

236

1) 23.6

2) 47.2

3) 70.8

4) 94.4

5) 118.0

6) 141.6

7) 165.2

8) 188.8

9) 212.4

187

1) 18.7

2) 37.4

3) 56.1

4) 74.8

5) 93.5

6) 112.2

7) 130.9

8) 149.6

9) 168.3

188

1) 18.8

2) 37.6

3) 56.4

4) 75.2

5) 94.0

6) 112.8

7) 131.6

8) 150.4

9) 169.2



|     |    | Bin             | d.    | Tang            | d.    | Chang           | d.    | Chang           | d.    |    |    |
|-----|----|-----------------|-------|-----------------|-------|-----------------|-------|-----------------|-------|----|----|
| 424 | 0  | 0 0 0 0 0 0 0 0 | 1 1 1 | 0 0 0 0 0 0 0 0 | 1 1 1 | 0 0 0 0 0 0 0 0 | 1 1 1 | 0 0 0 0 0 0 0 0 | 1 1 1 | 0  | 20 |
| 425 | 1  | 0 0 0 0 0 0 0 0 | 1 1 1 | 0 0 0 0 0 0 0 0 | 1 1 1 | 0 0 0 0 0 0 0 0 | 1 1 1 | 0 0 0 0 0 0 0 0 | 1 1 1 | 1  | 19 |
| 426 | 2  | 0 0 0 0 0 0 0 0 | 1 1 1 | 0 0 0 0 0 0 0 0 | 1 1 1 | 0 0 0 0 0 0 0 0 | 1 1 1 | 0 0 0 0 0 0 0 0 | 1 1 1 | 2  | 18 |
| 427 | 3  | 0 0 0 0 0 0 0 0 | 1 1 1 | 0 0 0 0 0 0 0 0 | 1 1 1 | 0 0 0 0 0 0 0 0 | 1 1 1 | 0 0 0 0 0 0 0 0 | 1 1 1 | 3  | 17 |
| 428 | 4  | 0 0 0 0 0 0 0 0 | 1 1 1 | 0 0 0 0 0 0 0 0 | 1 1 1 | 0 0 0 0 0 0 0 0 | 1 1 1 | 0 0 0 0 0 0 0 0 | 1 1 1 | 4  | 16 |
| 429 | 5  | 0 0 0 0 0 0 0 0 | 1 1 1 | 0 0 0 0 0 0 0 0 | 1 1 1 | 0 0 0 0 0 0 0 0 | 1 1 1 | 0 0 0 0 0 0 0 0 | 1 1 1 | 5  | 15 |
| 430 | 6  | 0 0 0 0 0 0 0 0 | 1 1 1 | 0 0 0 0 0 0 0 0 | 1 1 1 | 0 0 0 0 0 0 0 0 | 1 1 1 | 0 0 0 0 0 0 0 0 | 1 1 1 | 6  | 14 |
| 431 | 7  | 0 0 0 0 0 0 0 0 | 1 1 1 | 0 0 0 0 0 0 0 0 | 1 1 1 | 0 0 0 0 0 0 0 0 | 1 1 1 | 0 0 0 0 0 0 0 0 | 1 1 1 | 7  | 13 |
| 432 | 8  | 0 0 0 0 0 0 0 0 | 1 1 1 | 0 0 0 0 0 0 0 0 | 1 1 1 | 0 0 0 0 0 0 0 0 | 1 1 1 | 0 0 0 0 0 0 0 0 | 1 1 1 | 8  | 12 |
| 433 | 9  | 0 0 0 0 0 0 0 0 | 1 1 1 | 0 0 0 0 0 0 0 0 | 1 1 1 | 0 0 0 0 0 0 0 0 | 1 1 1 | 0 0 0 0 0 0 0 0 | 1 1 1 | 9  | 11 |
| 434 | 10 | 0 0 0 0 0 0 0 0 | 1 1 1 | 0 0 0 0 0 0 0 0 | 1 1 1 | 0 0 0 0 0 0 0 0 | 1 1 1 | 0 0 0 0 0 0 0 0 | 1 1 1 | 10 | 10 |



|    | n | Sin       | d   | Tang      | d. c. | Cotg      | Cos       | d.  | n  | i  |
|----|---|-----------|-----|-----------|-------|-----------|-----------|-----|----|----|
| 50 | 0 | 0.7660447 | 216 | 0.6427876 | 424   | 0.5591858 | 0.6427876 | 188 | 0  | 10 |
|    | 1 | 0.7662511 | 215 | 0.6430011 | 424   | 0.5593993 | 0.6430011 | 189 | 50 |    |
|    | 2 | 0.7664575 | 215 | 0.6432146 | 424   | 0.5596128 | 0.6432146 | 189 | 40 |    |
|    | 3 | 0.7666639 | 215 | 0.6434281 | 424   | 0.5598263 | 0.6434281 | 189 | 30 |    |
|    | 4 | 0.7668703 | 215 | 0.6436416 | 424   | 0.5600398 | 0.6436416 | 188 | 20 |    |
|    | 5 | 0.7670767 | 215 | 0.6438551 | 424   | 0.5602533 | 0.6438551 | 188 | 10 |    |
| 51 | 0 | 0.7672831 | 215 | 0.6440686 | 424   | 0.5604668 | 0.6440686 | 189 | 0  | 9  |
|    | 1 | 0.7674895 | 215 | 0.6442821 | 424   | 0.5606803 | 0.6442821 | 189 | 50 |    |
|    | 2 | 0.7676959 | 215 | 0.6444956 | 424   | 0.5608938 | 0.6444956 | 189 | 40 |    |
|    | 3 | 0.7679023 | 215 | 0.6447091 | 424   | 0.5611073 | 0.6447091 | 189 | 30 |    |
|    | 4 | 0.7681087 | 215 | 0.6449226 | 424   | 0.5613208 | 0.6449226 | 188 | 20 |    |
|    | 5 | 0.7683151 | 215 | 0.6451361 | 424   | 0.5615343 | 0.6451361 | 189 | 10 |    |
| 52 | 0 | 0.7685215 | 215 | 0.6453496 | 424   | 0.5617478 | 0.6453496 | 189 | 0  | 8  |
|    | 1 | 0.7687279 | 215 | 0.6455631 | 424   | 0.5619613 | 0.6455631 | 189 | 50 |    |
|    | 2 | 0.7689343 | 215 | 0.6457766 | 424   | 0.5621748 | 0.6457766 | 189 | 40 |    |
|    | 3 | 0.7691407 | 215 | 0.6459901 | 424   | 0.5623883 | 0.6459901 | 189 | 30 |    |
|    | 4 | 0.7693471 | 215 | 0.6462036 | 424   | 0.5626018 | 0.6462036 | 188 | 20 |    |
|    | 5 | 0.7695535 | 215 | 0.6464171 | 424   | 0.5628153 | 0.6464171 | 189 | 10 |    |
| 53 | 0 | 0.7697599 | 215 | 0.6466306 | 424   | 0.5630288 | 0.6466306 | 189 | 0  | 7  |
|    | 1 | 0.7699663 | 215 | 0.6468441 | 424   | 0.5632423 | 0.6468441 | 189 | 50 |    |
|    | 2 | 0.7701727 | 215 | 0.6470576 | 424   | 0.5634558 | 0.6470576 | 189 | 40 |    |
|    | 3 | 0.7703791 | 215 | 0.6472711 | 424   | 0.5636693 | 0.6472711 | 189 | 30 |    |
|    | 4 | 0.7705855 | 215 | 0.6474846 | 424   | 0.5638828 | 0.6474846 | 189 | 20 |    |
|    | 5 | 0.7707919 | 215 | 0.6476981 | 424   | 0.5640963 | 0.6476981 | 188 | 10 |    |
| 54 | 0 | 0.7709983 | 215 | 0.6479116 | 424   | 0.5643098 | 0.6479116 | 189 | 0  | 6  |
|    | 1 | 0.7712047 | 215 | 0.6481251 | 424   | 0.5645233 | 0.6481251 | 189 | 50 |    |
|    | 2 | 0.7714111 | 215 | 0.6483386 | 424   | 0.5647368 | 0.6483386 | 189 | 40 |    |
|    | 3 | 0.7716175 | 215 | 0.6485521 | 424   | 0.5649503 | 0.6485521 | 189 | 30 |    |
|    | 4 | 0.7718239 | 215 | 0.6487656 | 424   | 0.5651638 | 0.6487656 | 189 | 20 |    |
|    | 5 | 0.7720303 | 215 | 0.6489791 | 424   | 0.5653773 | 0.6489791 | 189 | 10 |    |
| 55 | 0 | 0.7722367 | 215 | 0.6491926 | 424   | 0.5655908 | 0.6491926 | 189 | 0  | 5  |
|    | 1 | 0.7724431 | 215 | 0.6494061 | 424   | 0.5658043 | 0.6494061 | 189 | 50 |    |
|    | 2 | 0.7726495 | 215 | 0.6496196 | 424   | 0.5660178 | 0.6496196 | 189 | 40 |    |
|    | 3 | 0.7728559 | 215 | 0.6498331 | 424   | 0.5662313 | 0.6498331 | 190 | 30 |    |
|    | 4 | 0.7730623 | 215 | 0.6500466 | 424   | 0.5664448 | 0.6500466 | 189 | 20 |    |
|    | 5 | 0.7732687 | 215 | 0.6502601 | 424   | 0.5666583 | 0.6502601 | 189 | 10 |    |
| 56 | 0 | 0.7734751 | 215 | 0.6504736 | 424   | 0.5668718 | 0.6504736 | 189 | 0  | 4  |
|    | 1 | 0.7736815 | 215 | 0.6506871 | 424   | 0.5670853 | 0.6506871 | 189 | 50 |    |
|    | 2 | 0.7738879 | 215 | 0.6509006 | 424   | 0.5672988 | 0.6509006 | 189 | 40 |    |
|    | 3 | 0.7740943 | 215 | 0.6511141 | 424   | 0.5675123 | 0.6511141 | 189 | 30 |    |
|    | 4 | 0.7743007 | 215 | 0.6513276 | 424   | 0.5677258 | 0.6513276 | 189 | 20 |    |
|    | 5 | 0.7745071 | 215 | 0.6515411 | 424   | 0.5679393 | 0.6515411 | 189 | 10 |    |
| 57 | 0 | 0.7747135 | 215 | 0.6517546 | 424   | 0.5681528 | 0.6517546 | 189 | 0  | 3  |
|    | 1 | 0.7749199 | 215 | 0.6519681 | 424   | 0.5683663 | 0.6519681 | 189 | 50 |    |
|    | 2 | 0.7751263 | 215 | 0.6521816 | 424   | 0.5685798 | 0.6521816 | 189 | 40 |    |
|    | 3 | 0.7753327 | 215 | 0.6523951 | 424   | 0.5687933 | 0.6523951 | 189 | 30 |    |
|    | 4 | 0.7755391 | 215 | 0.6526086 | 424   | 0.5690068 | 0.6526086 | 189 | 20 |    |
|    | 5 | 0.7757455 | 215 | 0.6528221 | 424   | 0.5692203 | 0.6528221 | 189 | 10 |    |
| 58 | 0 | 0.7759519 | 215 | 0.6530356 | 424   | 0.5694338 | 0.6530356 | 189 | 0  | 2  |
|    | 1 | 0.7761583 | 215 | 0.6532491 | 424   | 0.5696473 | 0.6532491 | 189 | 50 |    |
|    | 2 | 0.7763647 | 215 | 0.6534626 | 424   | 0.5698608 | 0.6534626 | 189 | 40 |    |
|    | 3 | 0.7765711 | 215 | 0.6536761 | 424   | 0.5700743 | 0.6536761 | 189 | 30 |    |
|    | 4 | 0.7767775 | 215 | 0.6538896 | 424   | 0.5702878 | 0.6538896 | 189 | 20 |    |
|    | 5 | 0.7769839 | 215 | 0.6541031 | 424   | 0.5705013 | 0.6541031 | 189 | 10 |    |
| 59 | 0 | 0.7771903 | 215 | 0.6543166 | 424   | 0.5707148 | 0.6543166 | 189 | 0  | 1  |
|    | 1 | 0.7773967 | 215 | 0.6545301 | 424   | 0.5709283 | 0.6545301 | 189 | 50 |    |
|    | 2 | 0.7776031 | 215 | 0.6547436 | 424   | 0.5711418 | 0.6547436 | 189 | 40 |    |
|    | 3 | 0.7778095 | 215 | 0.6549571 | 424   | 0.5713553 | 0.6549571 | 189 | 30 |    |
|    | 4 | 0.7780159 | 215 | 0.6551706 | 424   | 0.5715688 | 0.6551706 | 189 | 20 |    |
|    | 5 | 0.7782223 | 215 | 0.6553841 | 424   | 0.5717823 | 0.6553841 | 189 | 10 |    |
| 60 | 0 | 0.7784287 | 215 | 0.6555976 | 424   | 0.5719958 | 0.6555976 | 189 | 0  | 0  |
|    | 1 | 0.7786351 | 215 | 0.6558111 | 424   | 0.5722093 | 0.6558111 | 189 | 50 |    |
|    | 2 | 0.7788415 | 215 | 0.6560246 | 424   | 0.5724228 | 0.6560246 | 189 | 40 |    |
|    | 3 | 0.7790479 | 215 | 0.6562381 | 424   | 0.5726363 | 0.6562381 | 189 | 30 |    |
|    | 4 | 0.7792543 | 215 | 0.6564516 | 424   | 0.5728498 | 0.6564516 | 189 | 20 |    |
|    | 5 | 0.7794607 | 215 | 0.6566651 | 424   | 0.5730633 | 0.6566651 | 189 | 10 |    |



|         |    | Sin          | d.  | Tang       | d. c. | Cotg       | Cos        | d.  |    |    |
|---------|----|--------------|-----|------------|-------|------------|------------|-----|----|----|
| 0       | 0  | 9.825 5109   | 234 | 9.954 4374 | 424   | 0.045 5626 | 9.871 0735 | 190 | 0  | 60 |
| 424     | 10 | 9.825 5343   | 234 | 9.954 4798 | 423   | 0.045 5202 | 9.871 0545 | 190 | 50 |    |
| 1 42.4  | 20 | 9.825 5577   | 233 | 9.954 5221 | 424   | 0.045 4779 | 9.871 0355 | 189 | 40 |    |
| 2 84.8  | 30 | 9.825 5810   | 234 | 9.954 5645 | 423   | 0.045 4355 | 9.871 0166 | 190 | 30 |    |
| 3 127.2 | 40 | 9.825 6044   | 234 | 9.954 6068 | 423   | 0.045 3932 | 9.870 9976 | 190 | 20 |    |
| 4 169.6 | 50 | 9.825 6278   | 234 | 9.954 6491 | 423   | 0.045 3509 | 9.870 9786 | 189 | 10 |    |
| 5 212.0 |    |              |     |            |       |            |            |     |    |    |
| 6 254.4 | 1  | 0 9.825 6512 | 233 | 9.954 6915 | 423   | 0.045 3085 | 9.870 9597 | 190 | 0  | 59 |
| 7 296.8 | 10 | 9.825 6745   | 233 | 9.954 7338 | 424   | 0.045 2662 | 9.870 9407 | 190 | 50 |    |
| 8 339.2 | 20 | 9.825 6979   | 234 | 9.954 7762 | 423   | 0.045 2238 | 9.870 9217 | 189 | 40 |    |
| 9 381.6 | 30 | 9.825 7213   | 233 | 9.954 8185 | 423   | 0.045 1815 | 9.870 9028 | 190 | 30 |    |
|         | 40 | 9.825 7446   | 234 | 9.954 8608 | 423   | 0.045 1392 | 9.870 8838 | 190 | 20 |    |
|         | 50 | 9.825 7680   | 233 | 9.954 9032 | 424   | 0.045 0968 | 9.870 8648 | 190 | 10 |    |
|         |    |              |     |            |       |            |            |     |    |    |
| 423     | 2  | 0 9.825 7913 | 234 | 9.954 9455 | 424   | 0.045 0545 | 9.870 8458 | 190 | 0  | 58 |
| 1 42.3  | 10 | 9.825 8147   | 234 | 9.954 9879 | 423   | 0.045 0121 | 9.870 8268 | 189 | 50 |    |
| 2 84.6  | 20 | 9.825 8381   | 233 | 9.955 0302 | 423   | 0.044 9698 | 9.870 8079 | 190 | 40 |    |
| 3 126.9 | 30 | 9.825 8614   | 233 | 9.955 0725 | 424   | 0.044 9275 | 9.870 7889 | 190 | 30 |    |
| 4 169.2 | 40 | 9.825 8848   | 234 | 9.955 1149 | 423   | 0.044 8851 | 9.870 7699 | 190 | 20 |    |
| 5 211.5 | 50 | 9.825 9081   | 233 | 9.955 1572 | 423   | 0.044 8428 | 9.870 7509 | 190 | 10 |    |
| 6 253.8 |    |              |     |            |       |            |            |     |    |    |
| 7 296.1 | 3  | 0 9.825 9314 | 234 | 9.955 1995 | 424   | 0.044 8005 | 9.870 7319 | 190 | 0  | 57 |
| 8 338.4 | 10 | 9.825 9548   | 233 | 9.955 2419 | 423   | 0.044 7581 | 9.870 7129 | 190 | 50 |    |
| 9 380.7 | 20 | 9.825 9781   | 234 | 9.955 2842 | 423   | 0.044 7158 | 9.870 6939 | 190 | 40 |    |
|         | 30 | 9.826 0015   | 233 | 9.955 3265 | 424   | 0.044 6735 | 9.870 6749 | 190 | 30 |    |
|         | 40 | 9.826 0248   | 233 | 9.955 3689 | 423   | 0.044 6311 | 9.870 6559 | 190 | 20 |    |
|         | 50 | 9.826 0481   | 234 | 9.955 4112 | 423   | 0.044 5888 | 9.870 6369 | 190 | 10 |    |
|         |    |              |     |            |       |            |            |     |    |    |
| 234     | 4  | 0 9.826 0715 | 233 | 9.955 4535 | 424   | 0.044 5465 | 9.870 6179 | 190 | 0  | 56 |
| 1 23.4  | 10 | 9.826 0948   | 233 | 9.955 4959 | 423   | 0.044 5041 | 9.870 5989 | 190 | 50 |    |
| 2 46.8  | 20 | 9.826 1181   | 233 | 9.955 5382 | 423   | 0.044 4618 | 9.870 5799 | 190 | 40 |    |
| 3 70.2  | 30 | 9.826 1414   | 233 | 9.955 5805 | 424   | 0.044 4195 | 9.870 5609 | 190 | 30 |    |
| 4 93.6  | 40 | 9.826 1648   | 234 | 9.955 6229 | 423   | 0.044 3771 | 9.870 5419 | 190 | 20 |    |
| 5 117.0 | 50 | 9.826 1881   | 233 | 9.955 6652 | 423   | 0.044 3348 | 9.870 5229 | 190 | 10 |    |
| 6 140.4 |    |              |     |            |       |            |            |     |    |    |
| 7 163.8 | 5  | 0 9.826 2114 | 233 | 9.955 7075 | 423   | 0.044 2925 | 9.870 5039 | 190 | 0  | 55 |
| 8 187.2 | 10 | 9.826 2347   | 233 | 9.955 7498 | 424   | 0.044 2502 | 9.870 4849 | 191 | 50 |    |
| 9 210.6 | 20 | 9.826 2580   | 233 | 9.955 7922 | 423   | 0.044 2078 | 9.870 4658 | 191 | 40 |    |
|         | 30 | 9.826 2813   | 233 | 9.955 8345 | 423   | 0.044 1655 | 9.870 4468 | 190 | 30 |    |
|         | 40 | 9.826 3046   | 233 | 9.955 8768 | 424   | 0.044 1232 | 9.870 4278 | 190 | 20 |    |
|         | 50 | 9.826 3279   | 233 | 9.955 9192 | 423   | 0.044 0808 | 9.870 4088 | 190 | 10 |    |
|         |    |              |     |            |       |            |            |     |    |    |
| 233     | 6  | 0 9.826 3512 | 234 | 9.955 9615 | 423   | 0.044 0385 | 9.870 3898 | 191 | 0  | 54 |
| 1 23.3  | 10 | 9.826 3746   | 232 | 9.956 0038 | 423   | 0.043 9962 | 9.870 3707 | 190 | 50 |    |
| 2 46.6  | 20 | 9.826 3978   | 233 | 9.956 0461 | 424   | 0.043 9539 | 9.870 3517 | 190 | 40 |    |
| 3 69.9  | 30 | 9.826 4211   | 233 | 9.956 0885 | 423   | 0.043 9115 | 9.870 3327 | 190 | 30 |    |
| 4 93.2  | 40 | 9.826 4444   | 233 | 9.956 1308 | 423   | 0.043 8692 | 9.870 3137 | 191 | 20 |    |
| 5 116.5 | 50 | 9.826 4677   | 233 | 9.956 1731 | 423   | 0.043 8269 | 9.870 2946 | 191 | 10 |    |
| 6 139.8 |    |              |     |            |       |            |            |     |    |    |
| 7 163.1 | 7  | 0 9.826 4910 | 233 | 9.956 2154 | 424   | 0.043 7846 | 9.870 2756 | 191 | 0  | 53 |
| 8 186.4 | 10 | 9.826 5143   | 233 | 9.956 2578 | 423   | 0.043 7422 | 9.870 2565 | 190 | 50 |    |
| 9 209.7 | 20 | 9.826 5376   | 233 | 9.956 3001 | 423   | 0.043 6999 | 9.870 2375 | 190 | 40 |    |
|         | 30 | 9.826 5609   | 233 | 9.956 3424 | 423   | 0.043 6576 | 9.870 2185 | 191 | 30 |    |
|         | 40 | 9.826 5842   | 233 | 9.956 3847 | 424   | 0.043 6153 | 9.870 1994 | 191 | 20 |    |
|         | 50 | 9.826 6074   | 232 | 9.956 4271 | 423   | 0.043 5729 | 9.870 1804 | 191 | 10 |    |
|         |    |              |     |            |       |            |            |     |    |    |
| 189     | 8  | 0 9.826 6307 | 233 | 9.956 4694 | 423   | 0.043 5306 | 9.870 1613 | 190 | 0  | 52 |
| 1 18.9  | 10 | 9.826 6540   | 233 | 9.956 5117 | 423   | 0.043 4883 | 9.870 1423 | 191 | 50 |    |
| 2 37.8  | 20 | 9.826 6773   | 232 | 9.956 5540 | 423   | 0.043 4460 | 9.870 1232 | 191 | 40 |    |
| 3 56.7  | 30 | 9.826 7005   | 233 | 9.956 5963 | 424   | 0.043 4037 | 9.870 1042 | 191 | 30 |    |
| 4 75.6  | 40 | 9.826 7238   | 233 | 9.956 6387 | 423   | 0.043 3613 | 9.870 0851 | 191 | 20 |    |
| 5 94.5  | 50 | 9.826 7471   | 233 | 9.956 6810 | 423   | 0.043 3190 | 9.870 0661 | 191 | 10 |    |
| 6 113.4 |    |              |     |            |       |            |            |     |    |    |
| 7 132.3 | 9  | 0 9.826 7703 | 232 | 9.956 7233 | 423   | 0.043 2767 | 9.870 0470 | 190 | 0  | 51 |
| 8 151.2 | 10 | 9.826 7936   | 232 | 9.956 7656 | 423   | 0.043 2344 | 9.870 0280 | 191 | 50 |    |
| 9 170.1 | 20 | 9.826 8168   | 232 | 9.956 8079 | 424   | 0.043 1921 | 9.870 0089 | 191 | 40 |    |
|         | 30 | 9.826 8401   | 233 | 9.956 8503 | 423   | 0.043 1497 | 9.869 9898 | 191 | 30 |    |
|         | 40 | 9.826 8633   | 232 | 9.956 8926 | 423   | 0.043 1074 | 9.869 9708 | 191 | 20 |    |
|         | 50 | 9.826 8866   | 232 | 9.956 9349 | 423   | 0.043 0651 | 9.869 9517 | 191 | 10 |    |
|         |    |              |     |            |       |            |            |     |    |    |
| 180     | 10 | 0 9.826 9098 | 232 | 9.956 9772 | 423   | 0.043 0228 | 9.869 9326 | 191 | 0  | 50 |
| 1 19.0  |    |              |     |            |       |            |            |     |    |    |
| 2 38.0  |    |              |     |            |       |            |            |     |    |    |
| 3 57.0  |    |              |     |            |       |            |            |     |    |    |
| 4 76.0  |    |              |     |            |       |            |            |     |    |    |
| 5 95.0  |    |              |     |            |       |            |            |     |    |    |
| 6 114.0 |    |              |     |            |       |            |            |     |    |    |
| 7 133.0 |    |              |     |            |       |            |            |     |    |    |
| 8 152.0 |    |              |     |            |       |            |            |     |    |    |
| 9 171.0 |    |              |     |            |       |            |            |     |    |    |
|         |    |              |     |            |       |            |            |     |    |    |
|         |    | Cos          | d.  | Cotg       | d. c. | Tang       | Sin        | d.  |    |    |



|     | Sta        | d   | Tang | d. c. | Colg     | Con | d. | n | i |
|-----|------------|-----|------|-------|----------|-----|----|---|---|
| 10  | 9.869 9136 | 190 | 0    | 50    | 423      |     |    |   |   |
| 11  | 9.869 9136 | 191 | 50   | 40    | 1) 42.3  |     |    |   |   |
| 12  | 9.869 8945 | 191 | 40   | 30    | 2) 84.6  |     |    |   |   |
| 13  | 9.869 8754 | 191 | 30   | 20    | 3) 126.9 |     |    |   |   |
| 14  | 9.869 8563 | 191 | 20   | 10    | 4) 169.2 |     |    |   |   |
| 15  | 9.869 8373 | 191 | 10   | 0     | 5) 211.5 |     |    |   |   |
| 16  | 9.869 8182 | 191 | 0    | 49    | 6) 253.8 |     |    |   |   |
| 17  | 9.869 7991 | 191 | 50   | 40    | 7) 296.1 |     |    |   |   |
| 18  | 9.869 7800 | 191 | 40   | 30    | 8) 338.4 |     |    |   |   |
| 19  | 9.869 7609 | 191 | 30   | 20    | 9) 380.7 |     |    |   |   |
| 20  | 9.869 7418 | 191 | 20   | 10    |          |     |    |   |   |
| 21  | 9.869 7228 | 191 | 10   | 0     | 422      |     |    |   |   |
| 22  | 9.869 7037 | 191 | 0    | 48    | 1) 42.2  |     |    |   |   |
| 23  | 9.869 6846 | 191 | 50   | 40    | 2) 84.5  |     |    |   |   |
| 24  | 9.869 6655 | 191 | 40   | 30    | 3) 126.6 |     |    |   |   |
| 25  | 9.869 6464 | 191 | 30   | 20    | 4) 168.8 |     |    |   |   |
| 26  | 9.869 6273 | 191 | 20   | 10    | 5) 211.0 |     |    |   |   |
| 27  | 9.869 6082 | 191 | 10   | 0     | 6) 253.2 |     |    |   |   |
| 28  | 9.869 5891 | 191 | 0    | 47    | 7) 295.4 |     |    |   |   |
| 29  | 9.869 5700 | 191 | 50   | 40    | 8) 337.6 |     |    |   |   |
| 30  | 9.869 5509 | 191 | 40   | 30    | 9) 379.8 |     |    |   |   |
| 31  | 9.869 5318 | 191 | 30   | 20    |          |     |    |   |   |
| 32  | 9.869 5127 | 191 | 20   | 10    | 232      |     |    |   |   |
| 33  | 9.869 4935 | 191 | 10   | 0     | 1) 42.1  |     |    |   |   |
| 34  | 9.869 4744 | 191 | 0    | 46    | 2) 84.3  |     |    |   |   |
| 35  | 9.869 4553 | 191 | 50   | 40    | 3) 126.5 |     |    |   |   |
| 36  | 9.869 4362 | 191 | 40   | 30    | 4) 168.7 |     |    |   |   |
| 37  | 9.869 4171 | 191 | 30   | 20    | 5) 210.9 |     |    |   |   |
| 38  | 9.869 3980 | 191 | 20   | 10    | 6) 253.1 |     |    |   |   |
| 39  | 9.869 3789 | 191 | 10   | 0     | 7) 295.3 |     |    |   |   |
| 40  | 9.869 3597 | 191 | 0    | 45    | 8) 337.5 |     |    |   |   |
| 41  | 9.869 3406 | 191 | 50   | 40    | 9) 379.7 |     |    |   |   |
| 42  | 9.869 3215 | 191 | 40   | 30    | 231      |     |    |   |   |
| 43  | 9.869 3023 | 191 | 30   | 20    | 1) 42.0  |     |    |   |   |
| 44  | 9.869 2832 | 191 | 20   | 10    | 2) 84.2  |     |    |   |   |
| 45  | 9.869 2641 | 191 | 10   | 0     | 3) 126.4 |     |    |   |   |
| 46  | 9.869 2450 | 191 | 0    | 44    | 4) 168.6 |     |    |   |   |
| 47  | 9.869 2259 | 191 | 50   | 40    | 5) 210.8 |     |    |   |   |
| 48  | 9.869 2068 | 191 | 40   | 30    | 6) 253.0 |     |    |   |   |
| 49  | 9.869 1877 | 191 | 30   | 20    | 7) 295.2 |     |    |   |   |
| 50  | 9.869 1686 | 191 | 20   | 10    | 8) 337.4 |     |    |   |   |
| 51  | 9.869 1495 | 191 | 10   | 0     | 9) 379.6 |     |    |   |   |
| 52  | 9.869 1304 | 191 | 0    | 43    | 191      |     |    |   |   |
| 53  | 9.869 1113 | 191 | 50   | 40    | 1) 42.1  |     |    |   |   |
| 54  | 9.869 0922 | 191 | 40   | 30    | 2) 84.3  |     |    |   |   |
| 55  | 9.869 0731 | 191 | 30   | 20    | 3) 126.5 |     |    |   |   |
| 56  | 9.869 0540 | 191 | 20   | 10    | 4) 168.7 |     |    |   |   |
| 57  | 9.869 0349 | 191 | 10   | 0     | 5) 210.9 |     |    |   |   |
| 58  | 9.869 0158 | 191 | 0    | 42    | 6) 253.1 |     |    |   |   |
| 59  | 9.869 0000 | 191 | 50   | 40    | 7) 295.3 |     |    |   |   |
| 60  | 9.868 9900 | 191 | 40   | 30    | 8) 337.5 |     |    |   |   |
| 61  | 9.868 9700 | 191 | 30   | 20    | 9) 379.7 |     |    |   |   |
| 62  | 9.868 9500 | 191 | 20   | 10    |          |     |    |   |   |
| 63  | 9.868 9300 | 191 | 10   | 0     | 192      |     |    |   |   |
| 64  | 9.868 9100 | 191 | 0    | 41    | 1) 42.2  |     |    |   |   |
| 65  | 9.868 8900 | 191 | 50   | 40    | 2) 84.4  |     |    |   |   |
| 66  | 9.868 8700 | 191 | 40   | 30    | 3) 126.6 |     |    |   |   |
| 67  | 9.868 8500 | 191 | 30   | 20    | 4) 168.8 |     |    |   |   |
| 68  | 9.868 8300 | 191 | 20   | 10    | 5) 211.0 |     |    |   |   |
| 69  | 9.868 8100 | 191 | 10   | 0     | 6) 253.2 |     |    |   |   |
| 70  | 9.868 7900 | 191 | 0    | 40    | 7) 295.4 |     |    |   |   |
| 71  | 9.868 7700 | 191 | 50   | 40    | 8) 337.6 |     |    |   |   |
| 72  | 9.868 7500 | 191 | 40   | 30    | 9) 379.8 |     |    |   |   |
| 73  | 9.868 7300 | 191 | 30   | 20    |          |     |    |   |   |
| 74  | 9.868 7100 | 191 | 20   | 10    |          |     |    |   |   |
| 75  | 9.868 6900 | 191 | 10   | 0     |          |     |    |   |   |
| 76  | 9.868 6700 | 191 | 0    | 39    |          |     |    |   |   |
| 77  | 9.868 6500 | 191 | 50   | 40    |          |     |    |   |   |
| 78  | 9.868 6300 | 191 | 40   | 30    |          |     |    |   |   |
| 79  | 9.868 6100 | 191 | 30   | 20    |          |     |    |   |   |
| 80  | 9.868 5900 | 191 | 20   | 10    |          |     |    |   |   |
| 81  | 9.868 5700 | 191 | 10   | 0     |          |     |    |   |   |
| 82  | 9.868 5500 | 191 | 0    | 38    |          |     |    |   |   |
| 83  | 9.868 5300 | 191 | 50   | 40    |          |     |    |   |   |
| 84  | 9.868 5100 | 191 | 40   | 30    |          |     |    |   |   |
| 85  | 9.868 4900 | 191 | 30   | 20    |          |     |    |   |   |
| 86  | 9.868 4700 | 191 | 20   | 10    |          |     |    |   |   |
| 87  | 9.868 4500 | 191 | 10   | 0     |          |     |    |   |   |
| 88  | 9.868 4300 | 191 | 0    | 37    |          |     |    |   |   |
| 89  | 9.868 4100 | 191 | 50   | 40    |          |     |    |   |   |
| 90  | 9.868 3900 | 191 | 40   | 30    |          |     |    |   |   |
| 91  | 9.868 3700 | 191 | 30   | 20    |          |     |    |   |   |
| 92  | 9.868 3500 | 191 | 20   | 10    |          |     |    |   |   |
| 93  | 9.868 3300 | 191 | 10   | 0     |          |     |    |   |   |
| 94  | 9.868 3100 | 191 | 0    | 36    |          |     |    |   |   |
| 95  | 9.868 2900 | 191 | 50   | 40    |          |     |    |   |   |
| 96  | 9.868 2700 | 191 | 40   | 30    |          |     |    |   |   |
| 97  | 9.868 2500 | 191 | 30   | 20    |          |     |    |   |   |
| 98  | 9.868 2300 | 191 | 20   | 10    |          |     |    |   |   |
| 99  | 9.868 2100 | 191 | 10   | 0     |          |     |    |   |   |
| 100 | 9.868 1900 | 191 | 0    | 35    |          |     |    |   |   |



[illegible]



|    |   | Bin        | d.  | Tang       | d.  | Colg       | Con        | d.  |    |    |
|----|---|------------|-----|------------|-----|------------|------------|-----|----|----|
| 30 | 1 | 9.867 6111 | 193 | 9.867 6111 | 193 | 0.037 9175 | 9.867 6309 | 193 | 0  | 30 |
|    | 2 | 9.867 6112 | 193 | 9.867 6112 | 193 | 0.037 9175 | 9.867 6116 | 193 | 50 |    |
|    | 3 | 9.867 6113 | 193 | 9.867 6113 | 193 | 0.037 8263 | 9.867 5923 | 193 | 40 |    |
|    | 4 | 9.867 6114 | 193 | 9.867 6114 | 193 | 0.037 8267 | 9.867 5730 | 193 | 30 |    |
|    | 5 | 9.867 6115 | 193 | 9.867 6115 | 193 | 0.037 7785 | 9.867 5537 | 193 | 20 |    |
|    | 6 | 9.867 6116 | 193 | 9.867 6116 | 193 | 0.037 7362 | 9.867 5344 | 193 | 10 |    |
|    | 7 | 9.867 6117 | 193 | 9.867 6117 | 193 | 0.037 6919 | 9.867 5151 | 193 | 0  |    |
| 31 | 1 | 9.867 6118 | 193 | 9.867 6118 | 193 | 0.037 6516 | 9.867 4958 | 193 | 50 |    |
|    | 2 | 9.867 6119 | 193 | 9.867 6119 | 193 | 0.037 6094 | 9.867 4765 | 193 | 40 |    |
|    | 3 | 9.867 6120 | 193 | 9.867 6120 | 193 | 0.037 5671 | 9.867 4572 | 193 | 30 |    |
|    | 4 | 9.867 6121 | 193 | 9.867 6121 | 193 | 0.037 5248 | 9.867 4379 | 193 | 20 |    |
|    | 5 | 9.867 6122 | 193 | 9.867 6122 | 193 | 0.037 4826 | 9.867 4185 | 193 | 10 |    |
|    | 6 | 9.867 6123 | 193 | 9.867 6123 | 193 | 0.037 4403 | 9.867 3992 | 193 | 0  |    |
| 32 | 1 | 9.867 6124 | 193 | 9.867 6124 | 193 | 0.037 3980 | 9.867 3799 | 193 | 50 |    |
|    | 2 | 9.867 6125 | 193 | 9.867 6125 | 193 | 0.037 3558 | 9.867 3606 | 193 | 40 |    |
|    | 3 | 9.867 6126 | 193 | 9.867 6126 | 193 | 0.037 3135 | 9.867 3413 | 193 | 30 |    |
|    | 4 | 9.867 6127 | 193 | 9.867 6127 | 193 | 0.037 2712 | 9.867 3219 | 193 | 20 |    |
|    | 5 | 9.867 6128 | 193 | 9.867 6128 | 193 | 0.037 2290 | 9.867 3026 | 193 | 10 |    |
|    | 6 | 9.867 6129 | 193 | 9.867 6129 | 193 | 0.037 1867 | 9.867 2833 | 193 | 0  |    |
| 33 | 1 | 9.867 6130 | 193 | 9.867 6130 | 193 | 0.037 1444 | 9.867 2640 | 193 | 50 |    |
|    | 2 | 9.867 6131 | 193 | 9.867 6131 | 193 | 0.037 1022 | 9.867 2446 | 193 | 40 |    |
|    | 3 | 9.867 6132 | 193 | 9.867 6132 | 193 | 0.037 6009 | 9.867 2253 | 193 | 30 |    |
|    | 4 | 9.867 6133 | 193 | 9.867 6133 | 193 | 0.037 1757 | 9.867 2060 | 193 | 20 |    |
|    | 5 | 9.867 6134 | 193 | 9.867 6134 | 193 | 0.037 1334 | 9.867 1866 | 193 | 10 |    |
|    | 6 | 9.867 6135 | 193 | 9.867 6135 | 193 | 0.037 9111 | 9.867 1673 | 193 | 0  |    |
| 34 | 1 | 9.867 6136 | 193 | 9.867 6136 | 193 | 0.037 8909 | 9.867 1480 | 193 | 50 |    |
|    | 2 | 9.867 6137 | 193 | 9.867 6137 | 193 | 0.037 8486 | 9.867 1286 | 193 | 40 |    |
|    | 3 | 9.867 6138 | 193 | 9.867 6138 | 193 | 0.037 8063 | 9.867 1093 | 193 | 30 |    |
|    | 4 | 9.867 6139 | 193 | 9.867 6139 | 193 | 0.037 7641 | 9.867 0899 | 193 | 20 |    |
|    | 5 | 9.867 6140 | 193 | 9.867 6140 | 193 | 0.037 7218 | 9.867 0706 | 193 | 10 |    |
|    | 6 | 9.867 6141 | 193 | 9.867 6141 | 193 | 0.037 6796 | 9.867 0513 | 193 | 0  |    |
| 35 | 1 | 9.867 6142 | 193 | 9.867 6142 | 193 | 0.037 6373 | 9.867 0319 | 193 | 50 |    |
|    | 2 | 9.867 6143 | 193 | 9.867 6143 | 193 | 0.037 5950 | 9.867 0125 | 193 | 40 |    |
|    | 3 | 9.867 6144 | 193 | 9.867 6144 | 193 | 0.037 5528 | 9.867 0932 | 193 | 30 |    |
|    | 4 | 9.867 6145 | 193 | 9.867 6145 | 193 | 0.037 5105 | 9.867 0738 | 193 | 20 |    |
|    | 5 | 9.867 6146 | 193 | 9.867 6146 | 193 | 0.037 4683 | 9.867 0545 | 193 | 10 |    |
|    | 6 | 9.867 6147 | 193 | 9.867 6147 | 193 | 0.037 4260 | 9.867 0351 | 193 | 0  |    |
| 36 | 1 | 9.867 6148 | 193 | 9.867 6148 | 193 | 0.037 3837 | 9.867 0157 | 193 | 50 |    |
|    | 2 | 9.867 6149 | 193 | 9.867 6149 | 193 | 0.037 3415 | 9.867 0964 | 193 | 40 |    |
|    | 3 | 9.867 6150 | 193 | 9.867 6150 | 193 | 0.037 2992 | 9.867 0770 | 193 | 30 |    |
|    | 4 | 9.867 6151 | 193 | 9.867 6151 | 193 | 0.037 2570 | 9.867 0576 | 193 | 20 |    |
|    | 5 | 9.867 6152 | 193 | 9.867 6152 | 193 | 0.037 2147 | 9.867 0383 | 193 | 10 |    |
|    | 6 | 9.867 6153 | 193 | 9.867 6153 | 193 | 0.037 1725 | 9.867 0189 | 193 | 0  |    |
| 37 | 1 | 9.867 6154 | 193 | 9.867 6154 | 193 | 0.037 1302 | 9.867 7995 | 193 | 50 |    |
|    | 2 | 9.867 6155 | 193 | 9.867 6155 | 193 | 0.037 1079 | 9.867 7801 | 193 | 40 |    |
|    | 3 | 9.867 6156 | 193 | 9.867 6156 | 193 | 0.037 0957 | 9.867 7608 | 193 | 30 |    |
|    | 4 | 9.867 6157 | 193 | 9.867 6157 | 193 | 0.037 0834 | 9.867 7414 | 193 | 20 |    |
|    | 5 | 9.867 6158 | 193 | 9.867 6158 | 193 | 0.037 0712 | 9.867 7220 | 193 | 10 |    |
|    | 6 | 9.867 6159 | 193 | 9.867 6159 | 193 | 0.037 0589 | 9.867 7026 | 193 | 0  |    |
| 38 | 1 | 9.867 6160 | 193 | 9.867 6160 | 193 | 0.037 0267 | 9.867 6832 | 193 | 50 |    |
|    | 2 | 9.867 6161 | 193 | 9.867 6161 | 193 | 0.037 0144 | 9.867 6639 | 193 | 40 |    |
|    | 3 | 9.867 6162 | 193 | 9.867 6162 | 193 | 0.037 0022 | 9.867 6445 | 193 | 30 |    |
|    | 4 | 9.867 6163 | 193 | 9.867 6163 | 193 | 0.037 0000 | 9.867 6251 | 193 | 20 |    |
|    | 5 | 9.867 6164 | 193 | 9.867 6164 | 193 | 0.037 0000 | 9.867 6057 | 193 | 10 |    |
|    | 6 | 9.867 6165 | 193 | 9.867 6165 | 193 | 0.037 0000 | 9.867 5863 | 193 | 0  |    |
| 39 | 1 | 9.867 6166 | 193 | 9.867 6166 | 193 | 0.037 0000 | 9.867 5669 | 193 | 50 |    |
|    | 2 | 9.867 6167 | 193 | 9.867 6167 | 193 | 0.037 0000 | 9.867 5475 | 193 | 40 |    |
|    | 3 | 9.867 6168 | 193 | 9.867 6168 | 193 | 0.037 0000 | 9.867 5281 | 193 | 30 |    |
|    | 4 | 9.867 6169 | 193 | 9.867 6169 | 193 | 0.037 0000 | 9.867 5087 | 193 | 20 |    |
|    | 5 | 9.867 6170 | 193 | 9.867 6170 | 193 | 0.037 0000 | 9.867 4893 | 193 | 10 |    |
|    | 6 | 9.867 6171 | 193 | 9.867 6171 | 193 | 0.037 0000 | 9.867 4699 | 193 | 0  |    |
| 40 | 1 | 9.867 6172 | 193 | 9.867 6172 | 193 | 0.037 0000 | 9.867 4505 | 193 | 50 |    |
|    | 2 | 9.867 6173 | 193 | 9.867 6173 | 193 | 0.037 0000 | 9.867 4311 | 193 | 40 |    |
|    | 3 | 9.867 6174 | 193 | 9.867 6174 | 193 | 0.037 0000 | 9.867 4117 | 193 | 30 |    |
|    | 4 | 9.867 6175 | 193 | 9.867 6175 | 193 | 0.037 0000 | 9.867 3923 | 193 | 20 |    |
|    | 5 | 9.867 6176 | 193 | 9.867 6176 | 193 | 0.037 0000 | 9.867 3729 | 193 | 10 |    |
|    | 6 | 9.867 6177 | 193 | 9.867 6177 | 193 | 0.037 0000 | 9.867 3535 | 193 | 0  |    |



|     | 年  | 月  | 日        | 時間    | 場所       | 内容       | 備考       | 頁  |
|-----|----|----|----------|-------|----------|----------|----------|----|
| 423 | 10 | 10 | 10/10/10 | 10:00 | 10/10/10 | 10/10/10 | 10/10/10 | 20 |
|     |    |    | 10/10/10 | 10:00 | 10/10/10 | 10/10/10 | 10/10/10 |    |
|     |    |    | 10/10/10 | 10:00 | 10/10/10 | 10/10/10 | 10/10/10 |    |
|     |    |    | 10/10/10 | 10:00 | 10/10/10 | 10/10/10 | 10/10/10 |    |
|     |    |    | 10/10/10 | 10:00 | 10/10/10 | 10/10/10 | 10/10/10 |    |
| 44  | 10 | 10 | 10/10/10 | 10:00 | 10/10/10 | 10/10/10 | 10/10/10 | 19 |
|     |    |    | 10/10/10 | 10:00 | 10/10/10 | 10/10/10 | 10/10/10 |    |
|     |    |    | 10/10/10 | 10:00 | 10/10/10 | 10/10/10 | 10/10/10 |    |
|     |    |    | 10/10/10 | 10:00 | 10/10/10 | 10/10/10 | 10/10/10 |    |
|     |    |    | 10/10/10 | 10:00 | 10/10/10 | 10/10/10 | 10/10/10 |    |
| 45  | 10 | 10 | 10/10/10 | 10:00 | 10/10/10 | 10/10/10 | 10/10/10 | 18 |
|     |    |    | 10/10/10 | 10:00 | 10/10/10 | 10/10/10 | 10/10/10 |    |
|     |    |    | 10/10/10 | 10:00 | 10/10/10 | 10/10/10 | 10/10/10 |    |
|     |    |    | 10/10/10 | 10:00 | 10/10/10 | 10/10/10 | 10/10/10 |    |
|     |    |    | 10/10/10 | 10:00 | 10/10/10 | 10/10/10 | 10/10/10 |    |
| 46  | 10 | 10 | 10/10/10 | 10:00 | 10/10/10 | 10/10/10 | 10/10/10 | 17 |
|     |    |    | 10/10/10 | 10:00 | 10/10/10 | 10/10/10 | 10/10/10 |    |
|     |    |    | 10/10/10 | 10:00 | 10/10/10 | 10/10/10 | 10/10/10 |    |
|     |    |    | 10/10/10 | 10:00 | 10/10/10 | 10/10/10 | 10/10/10 |    |
|     |    |    | 10/10/10 | 10:00 | 10/10/10 | 10/10/10 | 10/10/10 |    |
| 47  | 10 | 10 | 10/10/10 | 10:00 | 10/10/10 | 10/10/10 | 10/10/10 | 16 |
|     |    |    | 10/10/10 | 10:00 | 10/10/10 | 10/10/10 | 10/10/10 |    |
|     |    |    | 10/10/10 | 10:00 | 10/10/10 | 10/10/10 | 10/10/10 |    |
|     |    |    | 10/10/10 | 10:00 | 10/10/10 | 10/10/10 | 10/10/10 |    |
|     |    |    | 10/10/10 | 10:00 | 10/10/10 | 10/10/10 | 10/10/10 |    |
| 48  | 10 | 10 | 10/10/10 | 10:00 | 10/10/10 | 10/10/10 | 10/10/10 | 15 |
|     |    |    | 10/10/10 | 10:00 | 10/10/10 | 10/10/10 | 10/10/10 |    |
|     |    |    | 10/10/10 | 10:00 | 10/10/10 | 10/10/10 | 10/10/10 |    |
|     |    |    | 10/10/10 | 10:00 | 10/10/10 | 10/10/10 | 10/10/10 |    |
|     |    |    | 10/10/10 | 10:00 | 10/10/10 | 10/10/10 | 10/10/10 |    |
| 49  | 10 | 10 | 10/10/10 | 10:00 | 10/10/10 | 10/10/10 | 10/10/10 | 14 |
|     |    |    | 10/10/10 | 10:00 | 10/10/10 | 10/10/10 | 10/10/10 |    |
|     |    |    | 10/10/10 | 10:00 | 10/10/10 | 10/10/10 | 10/10/10 |    |
|     |    |    | 10/10/10 | 10:00 | 10/10/10 | 10/10/10 | 10/10/10 |    |
|     |    |    | 10/10/10 | 10:00 | 10/10/10 | 10/10/10 | 10/10/10 |    |
| 50  | 10 | 10 | 10/10/10 | 10:00 | 10/10/10 | 10/10/10 | 10/10/10 | 13 |
|     |    |    | 10/10/10 | 10:00 | 10/10/10 | 10/10/10 | 10/10/10 |    |
|     |    |    | 10/10/10 | 10:00 | 10/10/10 | 10/10/10 | 10/10/10 |    |
|     |    |    | 10/10/10 | 10:00 | 10/10/10 | 10/10/10 | 10/10/10 |    |
|     |    |    | 10/10/10 | 10:00 | 10/10/10 | 10/10/10 | 10/10/10 |    |
| 51  | 10 | 10 | 10/10/10 | 10:00 | 10/10/10 | 10/10/10 | 10/10/10 | 12 |
|     |    |    | 10/10/10 | 10:00 | 10/10/10 | 10/10/10 | 10/10/10 |    |
|     |    |    | 10/10/10 | 10:00 | 10/10/10 | 10/10/10 | 10/10/10 |    |
|     |    |    | 10/10/10 | 10:00 | 10/10/10 | 10/10/10 | 10/10/10 |    |
|     |    |    | 10/10/10 | 10:00 | 10/10/10 | 10/10/10 | 10/10/10 |    |
| 52  | 10 | 10 | 10/10/10 | 10:00 | 10/10/10 | 10/10/10 | 10/10/10 | 11 |
|     |    |    | 10/10/10 | 10:00 | 10/10/10 | 10/10/10 | 10/10/10 |    |
|     |    |    | 10/10/10 | 10:00 | 10/10/10 | 10/10/10 | 10/10/10 |    |
|     |    |    | 10/10/10 | 10:00 | 10/10/10 | 10/10/10 | 10/10/10 |    |
|     |    |    | 10/10/10 | 10:00 | 10/10/10 | 10/10/10 | 10/10/10 |    |
| 53  | 10 | 10 | 10/10/10 | 10:00 | 10/10/10 | 10/10/10 | 10/10/10 | 10 |
|     |    |    | 10/10/10 | 10:00 | 10/10/10 | 10/10/10 | 10/10/10 |    |
|     |    |    | 10/10/10 | 10:00 | 10/10/10 | 10/10/10 | 10/10/10 |    |
|     |    |    | 10/10/10 | 10:00 | 10/10/10 | 10/10/10 | 10/10/10 |    |
|     |    |    | 10/10/10 | 10:00 | 10/10/10 | 10/10/10 | 10/10/10 |    |



|    | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d.  | "  |         |
|----|----|------------|-----|------------|-------|------------|------------|-----|----|---------|
| 50 | 0  | 9.832 4246 | 227 | 9.967 1225 | 423   | 0.032 8775 | 9.865 3021 | 195 | 0  | 10      |
|    | 10 | 9.832 4473 | 228 | 9.967 1648 | 422   | 0.032 8352 | 9.865 2826 | 196 | 50 | 423     |
|    | 20 | 9.832 4701 | 227 | 9.967 2070 | 422   | 0.032 7930 | 9.865 2630 | 195 | 40 | 1 42.3  |
|    | 30 | 9.832 4928 | 227 | 9.967 2492 | 423   | 0.032 7508 | 9.865 2435 | 195 | 30 | 2 84.6  |
|    | 40 | 9.832 5155 | 227 | 9.967 2915 | 423   | 0.032 7085 | 9.865 2240 | 195 | 20 | 3 126.9 |
|    | 50 | 9.832 5382 | 227 | 9.967 3337 | 422   | 0.032 6663 | 9.865 2045 | 195 | 10 | 4 169.4 |
| 51 | 0  | 9.832 5609 | 227 | 9.967 3759 | 423   | 0.032 6241 | 9.865 1849 | 196 | 0  | 5 211.5 |
|    | 10 | 9.832 5836 | 227 | 9.967 4182 | 422   | 0.032 5818 | 9.865 1654 | 195 | 50 | 6 253.8 |
|    | 20 | 9.832 6063 | 226 | 9.967 4604 | 422   | 0.032 5396 | 9.865 1459 | 195 | 40 | 7 296.1 |
|    | 30 | 9.832 6289 | 226 | 9.967 5026 | 422   | 0.032 4974 | 9.865 1263 | 196 | 30 | 8 338.4 |
|    | 40 | 9.832 6516 | 227 | 9.967 5448 | 423   | 0.032 4552 | 9.865 1068 | 195 | 20 | 9 380.7 |
|    | 50 | 9.832 6743 | 227 | 9.967 5871 | 422   | 0.032 4129 | 9.865 0873 | 196 | 10 |         |
| 52 | 0  | 9.832 6970 | 227 | 9.967 6293 | 422   | 0.032 3707 | 9.865 0677 | 195 | 0  | 422     |
|    | 10 | 9.832 7197 | 227 | 9.967 6715 | 422   | 0.032 3285 | 9.865 0482 | 196 | 50 | 1 42.2  |
|    | 20 | 9.832 7424 | 227 | 9.967 7137 | 422   | 0.032 2863 | 9.865 0286 | 195 | 40 | 2 84.4  |
|    | 30 | 9.832 7651 | 226 | 9.967 7560 | 423   | 0.032 2440 | 9.865 0091 | 195 | 30 | 3 126.6 |
|    | 40 | 9.832 7877 | 227 | 9.967 7982 | 422   | 0.032 2018 | 9.864 9895 | 196 | 20 | 4 168.3 |
|    | 50 | 9.832 8104 | 227 | 9.967 8404 | 423   | 0.032 1596 | 9.864 9700 | 195 | 10 | 5 211.0 |
| 53 | 0  | 9.832 8331 | 226 | 9.967 8827 | 422   | 0.032 1173 | 9.864 9504 | 196 | 0  | 6 253.2 |
|    | 10 | 9.832 8557 | 227 | 9.967 9249 | 422   | 0.032 0751 | 9.864 9309 | 195 | 50 | 7 295.4 |
|    | 20 | 9.832 8784 | 227 | 9.967 9671 | 422   | 0.032 0329 | 9.864 9113 | 196 | 40 | 8 337.6 |
|    | 30 | 9.832 9011 | 226 | 9.968 0093 | 423   | 0.031 9907 | 9.864 8918 | 195 | 30 | 9 379.8 |
|    | 40 | 9.832 9237 | 227 | 9.968 0516 | 422   | 0.031 9484 | 9.864 8722 | 196 | 20 |         |
|    | 50 | 9.832 9464 | 227 | 9.968 0938 | 422   | 0.031 9062 | 9.864 8526 | 195 | 10 | 226     |
| 54 | 0  | 9.832 9691 | 226 | 9.968 1360 | 422   | 0.031 8640 | 9.864 8331 | 196 | 0  | 1 42.0  |
|    | 10 | 9.832 9917 | 227 | 9.968 1782 | 422   | 0.031 8218 | 9.864 8135 | 195 | 50 | 2 45.2  |
|    | 20 | 9.833 0144 | 226 | 9.968 2204 | 423   | 0.031 7796 | 9.864 7939 | 196 | 40 | 3 67.3  |
|    | 30 | 9.833 0370 | 227 | 9.968 2627 | 422   | 0.031 7373 | 9.864 7744 | 195 | 30 | 4 90.4  |
|    | 40 | 9.833 0597 | 226 | 9.968 3049 | 422   | 0.031 6951 | 9.864 7548 | 196 | 20 | 5 113.0 |
|    | 50 | 9.833 0823 | 227 | 9.968 3471 | 422   | 0.031 6529 | 9.864 7352 | 195 | 10 | 6 135.6 |
| 55 | 0  | 9.833 1050 | 226 | 9.968 3893 | 423   | 0.031 6107 | 9.864 7156 | 196 | 0  | 7 158.2 |
|    | 10 | 9.833 1276 | 227 | 9.968 4316 | 422   | 0.031 5684 | 9.864 6961 | 195 | 50 | 8 180.8 |
|    | 20 | 9.833 1503 | 226 | 9.968 4738 | 422   | 0.031 5262 | 9.864 6765 | 196 | 40 | 9 202.4 |
|    | 30 | 9.833 1729 | 226 | 9.968 5160 | 422   | 0.031 4840 | 9.864 6569 | 196 | 30 |         |
|    | 40 | 9.833 1955 | 227 | 9.968 5582 | 422   | 0.031 4418 | 9.864 6373 | 195 | 20 | 225     |
|    | 50 | 9.833 2182 | 226 | 9.968 6004 | 423   | 0.031 3996 | 9.864 6177 | 196 | 10 | 1 22.5  |
| 56 | 0  | 9.833 2408 | 226 | 9.968 6427 | 422   | 0.031 3573 | 9.864 5981 | 196 | 0  | 2 45.0  |
|    | 10 | 9.833 2634 | 227 | 9.968 6849 | 422   | 0.031 3151 | 9.864 5785 | 195 | 50 | 3 67.5  |
|    | 20 | 9.833 2861 | 226 | 9.968 7271 | 422   | 0.031 2729 | 9.864 5590 | 196 | 40 | 4 90.0  |
|    | 30 | 9.833 3087 | 226 | 9.968 7693 | 422   | 0.031 2307 | 9.864 5394 | 196 | 30 | 5 112.5 |
|    | 40 | 9.833 3313 | 227 | 9.968 8115 | 423   | 0.031 1885 | 9.864 5198 | 195 | 20 | 6 135.0 |
|    | 50 | 9.833 3539 | 226 | 9.968 8538 | 422   | 0.031 1462 | 9.864 5002 | 196 | 10 | 7 157.5 |
| 57 | 0  | 9.833 3766 | 226 | 9.968 8960 | 422   | 0.031 1040 | 9.864 4806 | 196 | 0  | 8 180.0 |
|    | 10 | 9.833 3992 | 226 | 9.968 9382 | 422   | 0.031 0618 | 9.864 4610 | 195 | 50 | 9 202.5 |
|    | 20 | 9.833 4218 | 226 | 9.968 9804 | 422   | 0.031 0196 | 9.864 4414 | 196 | 40 |         |
|    | 30 | 9.833 4444 | 226 | 9.969 0226 | 423   | 0.030 9774 | 9.864 4218 | 196 | 30 | 196     |
|    | 40 | 9.833 4670 | 226 | 9.969 0649 | 422   | 0.030 9351 | 9.864 4022 | 197 | 20 | 1 19.6  |
|    | 50 | 9.833 4896 | 226 | 9.969 1071 | 422   | 0.030 8929 | 9.864 3825 | 196 | 10 | 2 39.2  |
| 58 | 0  | 9.833 5122 | 226 | 9.969 1493 | 422   | 0.030 8507 | 9.864 3629 | 196 | 0  | 3 58.8  |
|    | 10 | 9.833 5348 | 226 | 9.969 1915 | 422   | 0.030 8085 | 9.864 3433 | 196 | 50 | 4 78.4  |
|    | 20 | 9.833 5574 | 226 | 9.969 2337 | 422   | 0.030 7663 | 9.864 3237 | 196 | 40 | 5 98.0  |
|    | 30 | 9.833 5800 | 226 | 9.969 2759 | 423   | 0.030 7241 | 9.864 3041 | 196 | 30 | 6 117.6 |
|    | 40 | 9.833 6026 | 226 | 9.969 3182 | 422   | 0.030 6818 | 9.864 2845 | 196 | 20 | 7 137.2 |
|    | 50 | 9.833 6252 | 226 | 9.969 3604 | 422   | 0.030 6396 | 9.864 2649 | 197 | 10 | 8 156.8 |
| 59 | 0  | 9.833 6478 | 226 | 9.969 4026 | 422   | 0.030 5974 | 9.864 2452 | 196 | 0  | 9 176.4 |
|    | 10 | 9.833 6704 | 226 | 9.969 4448 | 422   | 0.030 5552 | 9.864 2256 | 196 | 50 |         |
|    | 20 | 9.833 6930 | 226 | 9.969 4870 | 422   | 0.030 5130 | 9.864 2060 | 196 | 40 | 197     |
|    | 30 | 9.833 7156 | 226 | 9.969 5292 | 422   | 0.030 4708 | 9.864 1864 | 197 | 30 | 1 19.7  |
|    | 40 | 9.833 7382 | 226 | 9.969 5714 | 423   | 0.030 4286 | 9.864 1667 | 196 | 20 | 2 39.4  |
|    | 50 | 9.833 7608 | 225 | 9.969 6137 | 422   | 0.030 3863 | 9.864 1471 | 196 | 10 | 3 58.1  |
| 60 | 0  | 9.833 7833 |     | 9.969 6559 |       | 0.030 3441 | 9.864 1275 | 196 | 0  | 4 78.8  |
|    | "  | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d.  | "  |         |



423  
0 1 2 3 4 5 6 7 8 9  
10 11 12 13 14 15 16 17 18 19  
20 21 22 23 24 25 26 27 28 29  
30 31 32 33 34 35 36 37 38 39  
40 41 42 43 44 45 46 47 48 49  
50 51 52 53 54 55 56 57 58 59  
60 61 62 63 64 65 66 67 68 69  
70 71 72 73 74 75 76 77 78 79  
80 81 82 83 84 85 86 87 88 89  
90 91 92 93 94 95 96 97 98 99

423  
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20 21 22 23 24 25 26 27 28 29  
30 31 32 33 34 35 36 37 38 39  
40 41 42 43 44 45 46 47 48 49  
50 51 52 53 54 55 56 57 58 59  
60 61 62 63 64 65 66 67 68 69  
70 71 72 73 74 75 76 77 78 79  
80 81 82 83 84 85 86 87 88 89  
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20 21 22 23 24 25 26 27 28 29  
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40 41 42 43 44 45 46 47 48 49  
50 51 52 53 54 55 56 57 58 59  
60 61 62 63 64 65 66 67 68 69  
70 71 72 73 74 75 76 77 78 79  
80 81 82 83 84 85 86 87 88 89  
90 91 92 93 94 95 96 97 98 99

423  
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10 11 12 13 14 15 16 17 18 19  
20 21 22 23 24 25 26 27 28 29  
30 31 32 33 34 35 36 37 38 39  
40 41 42 43 44 45 46 47 48 49  
50 51 52 53 54 55 56 57 58 59  
60 61 62 63 64 65 66 67 68 69  
70 71 72 73 74 75 76 77 78 79  
80 81 82 83 84 85 86 87 88 89  
90 91 92 93 94 95 96 97 98 99

423  
0 1 2 3 4 5 6 7 8 9  
10 11 12 13 14 15 16 17 18 19  
20 21 22 23 24 25 26 27 28 29  
30 31 32 33 34 35 36 37 38 39  
40 41 42 43 44 45 46 47 48 49  
50 51 52 53 54 55 56 57 58 59  
60 61 62 63 64 65 66 67 68 69  
70 71 72 73 74 75 76 77 78 79  
80 81 82 83 84 85 86 87 88 89  
90 91 92 93 94 95 96 97 98 99

423  
0 1 2 3 4 5 6 7 8 9  
10 11 12 13 14 15 16 17 18 19  
20 21 22 23 24 25 26 27 28 29  
30 31 32 33 34 35 36 37 38 39  
40 41 42 43 44 45 46 47 48 49  
50 51 52 53 54 55 56 57 58 59  
60 61 62 63 64 65 66 67 68 69  
70 71 72 73 74 75 76 77 78 79  
80 81 82 83 84 85 86 87 88 89  
90 91 92 93 94 95 96 97 98 99

|    |    | 8th        | d  | 10th       | d  | 12th       | d  | 14th       | d  |    |  |
|----|----|------------|----|------------|----|------------|----|------------|----|----|--|
| 0  | 0  | 0 11 11 11 | 11 | 0 11 11 11 | 11 | 0 11 11 11 | 11 | 0 11 11 11 | 11 | 60 |  |
| 1  | 1  | 0 11 11 11 | 11 | 0 11 11 11 | 11 | 0 11 11 11 | 11 | 0 11 11 11 | 11 | 59 |  |
| 2  | 2  | 0 11 11 11 | 11 | 0 11 11 11 | 11 | 0 11 11 11 | 11 | 0 11 11 11 | 11 | 58 |  |
| 3  | 3  | 0 11 11 11 | 11 | 0 11 11 11 | 11 | 0 11 11 11 | 11 | 0 11 11 11 | 11 | 57 |  |
| 4  | 4  | 0 11 11 11 | 11 | 0 11 11 11 | 11 | 0 11 11 11 | 11 | 0 11 11 11 | 11 | 56 |  |
| 5  | 5  | 0 11 11 11 | 11 | 0 11 11 11 | 11 | 0 11 11 11 | 11 | 0 11 11 11 | 11 | 55 |  |
| 6  | 6  | 0 11 11 11 | 11 | 0 11 11 11 | 11 | 0 11 11 11 | 11 | 0 11 11 11 | 11 | 54 |  |
| 7  | 7  | 0 11 11 11 | 11 | 0 11 11 11 | 11 | 0 11 11 11 | 11 | 0 11 11 11 | 11 | 53 |  |
| 8  | 8  | 0 11 11 11 | 11 | 0 11 11 11 | 11 | 0 11 11 11 | 11 | 0 11 11 11 | 11 | 52 |  |
| 9  | 9  | 0 11 11 11 | 11 | 0 11 11 11 | 11 | 0 11 11 11 | 11 | 0 11 11 11 | 11 | 51 |  |
| 10 | 10 | 0 11 11 11 | 11 | 0 11 11 11 | 11 | 0 11 11 11 | 11 | 0 11 11 11 | 11 | 50 |  |



|    | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d.  | "  |    |
|----|----|------------|-----|------------|-------|------------|------------|-----|----|----|
| 10 | 0  | 9.835 1341 | 225 | 9.972 1882 | 422   | 0.027 8118 | 9.862 9460 | 198 | 0  | 50 |
|    | 10 | 9.835 1566 | 224 | 9.972 2304 | 422   | 0.027 7696 | 9.862 9261 | 197 | 50 |    |
|    | 20 | 9.835 1790 | 224 | 9.972 2726 | 421   | 0.027 7274 | 9.862 9065 | 197 | 40 |    |
|    | 30 | 9.835 2015 | 225 | 9.972 3147 | 422   | 0.027 6853 | 9.862 8867 | 197 | 30 |    |
|    | 40 | 9.835 2239 | 224 | 9.972 3569 | 422   | 0.027 6431 | 9.862 8670 | 197 | 20 |    |
|    | 50 | 9.835 2463 | 225 | 9.972 3991 | 422   | 0.027 6009 | 9.862 8472 | 198 | 10 |    |
| 11 | 0  | 9.835 2688 | 224 | 9.972 4413 | 422   | 0.027 5587 | 9.862 8274 | 197 | 0  | 49 |
|    | 10 | 9.835 2912 | 224 | 9.972 4835 | 422   | 0.027 5165 | 9.862 8077 | 198 | 50 |    |
|    | 20 | 9.835 3136 | 225 | 9.972 5257 | 422   | 0.027 4743 | 9.862 7879 | 198 | 40 |    |
|    | 30 | 9.835 3361 | 224 | 9.972 5679 | 422   | 0.027 4321 | 9.862 7681 | 197 | 30 |    |
|    | 40 | 9.835 3585 | 224 | 9.972 6101 | 422   | 0.027 3899 | 9.862 7484 | 198 | 20 |    |
|    | 50 | 9.835 3809 | 224 | 9.972 6523 | 422   | 0.027 3477 | 9.862 7286 | 198 | 10 |    |
| 12 | 0  | 9.835 4033 | 225 | 9.972 6945 | 422   | 0.027 3055 | 9.862 7088 | 197 | 0  | 48 |
|    | 10 | 9.835 4258 | 224 | 9.972 7367 | 422   | 0.027 2633 | 9.862 6891 | 198 | 50 |    |
|    | 20 | 9.835 4482 | 224 | 9.972 7789 | 422   | 0.027 2211 | 9.862 6693 | 198 | 40 |    |
|    | 30 | 9.835 4706 | 224 | 9.972 8211 | 422   | 0.027 1789 | 9.862 6495 | 198 | 30 |    |
|    | 40 | 9.835 4930 | 224 | 9.972 8633 | 422   | 0.027 1367 | 9.862 6297 | 197 | 20 |    |
|    | 50 | 9.835 5154 | 224 | 9.972 9055 | 422   | 0.027 0945 | 9.862 6100 | 198 | 10 |    |
| 13 | 0  | 9.835 5378 | 224 | 9.972 9477 | 421   | 0.027 0523 | 9.862 5902 | 198 | 0  | 47 |
|    | 10 | 9.835 5602 | 224 | 9.972 9898 | 422   | 0.027 0102 | 9.862 5704 | 198 | 50 |    |
|    | 20 | 9.835 5826 | 224 | 9.973 0320 | 422   | 0.026 9680 | 9.862 5506 | 198 | 40 |    |
|    | 30 | 9.835 6050 | 224 | 9.973 0742 | 422   | 0.026 9258 | 9.862 5308 | 198 | 30 |    |
|    | 40 | 9.835 6274 | 224 | 9.973 1164 | 422   | 0.026 8836 | 9.862 5110 | 198 | 20 |    |
|    | 50 | 9.835 6498 | 224 | 9.973 1586 | 422   | 0.026 8414 | 9.862 4912 | 198 | 10 |    |
| 14 | 0  | 9.835 6722 | 224 | 9.973 2008 | 422   | 0.026 7992 | 9.862 4714 | 198 | 0  | 46 |
|    | 10 | 9.835 6946 | 224 | 9.973 2430 | 422   | 0.026 7570 | 9.862 4516 | 198 | 50 |    |
|    | 20 | 9.835 7170 | 224 | 9.973 2852 | 422   | 0.026 7148 | 9.862 4318 | 198 | 40 |    |
|    | 30 | 9.835 7394 | 224 | 9.973 3274 | 422   | 0.026 6726 | 9.862 4120 | 198 | 30 |    |
|    | 40 | 9.835 7618 | 224 | 9.973 3696 | 422   | 0.026 6304 | 9.862 3922 | 198 | 20 |    |
|    | 50 | 9.835 7842 | 224 | 9.973 4118 | 421   | 0.026 5882 | 9.862 3724 | 198 | 10 |    |
| 15 | 0  | 9.835 8066 | 224 | 9.973 4539 | 422   | 0.026 5461 | 9.862 3526 | 198 | 0  | 45 |
|    | 10 | 9.835 8290 | 223 | 9.973 4961 | 422   | 0.026 5039 | 9.862 3328 | 198 | 50 |    |
|    | 20 | 9.835 8513 | 224 | 9.973 5383 | 422   | 0.026 4617 | 9.862 3130 | 198 | 40 |    |
|    | 30 | 9.835 8737 | 224 | 9.973 5805 | 422   | 0.026 4195 | 9.862 2932 | 198 | 30 |    |
|    | 40 | 9.835 8961 | 224 | 9.973 6227 | 422   | 0.026 3773 | 9.862 2734 | 198 | 20 |    |
|    | 50 | 9.835 9185 | 223 | 9.973 6649 | 422   | 0.026 3351 | 9.862 2536 | 198 | 10 |    |
| 16 | 0  | 9.835 9408 | 224 | 9.973 7071 | 422   | 0.026 2929 | 9.862 2338 | 199 | 0  | 44 |
|    | 10 | 9.835 9632 | 224 | 9.973 7493 | 421   | 0.026 2507 | 9.862 2139 | 198 | 50 |    |
|    | 20 | 9.835 9856 | 223 | 9.973 7914 | 422   | 0.026 2086 | 9.862 1941 | 198 | 40 |    |
|    | 30 | 9.836 0079 | 224 | 9.973 8336 | 422   | 0.026 1664 | 9.862 1743 | 198 | 30 |    |
|    | 40 | 9.836 0303 | 223 | 9.973 8758 | 422   | 0.026 1242 | 9.862 1545 | 199 | 20 |    |
|    | 50 | 9.836 0526 | 224 | 9.973 9180 | 422   | 0.026 0820 | 9.862 1346 | 198 | 10 |    |
| 17 | 0  | 9.836 0750 | 224 | 9.973 9602 | 422   | 0.026 0398 | 9.862 1148 | 198 | 0  | 43 |
|    | 10 | 9.836 0974 | 223 | 9.974 0024 | 422   | 0.025 9976 | 9.862 0950 | 199 | 50 |    |
|    | 20 | 9.836 1197 | 224 | 9.974 0446 | 422   | 0.025 9554 | 9.862 0751 | 198 | 40 |    |
|    | 30 | 9.836 1421 | 223 | 9.974 0868 | 421   | 0.025 9132 | 9.862 0553 | 198 | 30 |    |
|    | 40 | 9.836 1644 | 223 | 9.974 1289 | 422   | 0.025 8711 | 9.862 0355 | 199 | 20 |    |
|    | 50 | 9.836 1868 | 224 | 9.974 1711 | 422   | 0.025 8289 | 9.862 0156 | 198 | 10 |    |
| 18 | 0  | 9.836 2091 | 223 | 9.974 2133 | 422   | 0.025 7867 | 9.861 9958 | 198 | 0  | 42 |
|    | 10 | 9.836 2314 | 224 | 9.974 2555 | 422   | 0.025 7445 | 9.861 9760 | 199 | 50 |    |
|    | 20 | 9.836 2538 | 223 | 9.974 2977 | 422   | 0.025 7023 | 9.861 9561 | 198 | 40 |    |
|    | 30 | 9.836 2761 | 224 | 9.974 3399 | 421   | 0.025 6601 | 9.861 9363 | 199 | 30 |    |
|    | 40 | 9.836 2985 | 224 | 9.974 3820 | 422   | 0.025 6180 | 9.861 9164 | 198 | 20 |    |
|    | 50 | 9.836 3208 | 223 | 9.974 4242 | 422   | 0.025 5758 | 9.861 8966 | 199 | 10 |    |
| 19 | 0  | 9.836 3431 | 224 | 9.974 4664 | 422   | 0.025 5336 | 9.861 8767 | 198 | 0  | 41 |
|    | 10 | 9.836 3655 | 223 | 9.974 5086 | 422   | 0.025 4914 | 9.861 8569 | 199 | 50 |    |
|    | 20 | 9.836 3878 | 223 | 9.974 5508 | 422   | 0.025 4492 | 9.861 8370 | 199 | 40 |    |
|    | 30 | 9.836 4101 | 223 | 9.974 5930 | 421   | 0.025 4070 | 9.861 8171 | 198 | 30 |    |
|    | 40 | 9.836 4324 | 223 | 9.974 6351 | 422   | 0.025 3649 | 9.861 7973 | 199 | 20 |    |
|    | 50 | 9.836 4547 | 223 | 9.974 6773 | 422   | 0.025 3227 | 9.861 7774 | 198 | 10 |    |
| 20 | 0  | 9.836 4771 | 224 | 9.974 7195 | 422   | 0.025 2805 | 9.861 7576 | 198 | 0  | 40 |
|    |    | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d.  | "  |    |



[illegible]







422

1 42.2

2 84.4

3 126.6

4 168.8

5 211.0

6 253.2

7 295.4

8 337.6

9 379.8

421

1 42.1

2 84.2

3 126.3

4 168.4

5 210.5

6 252.6

7 294.7

8 336.8

9 378.9

221

1 22.1

2 44.2

3 66.3

4 88.4

5 110.5

6 132.6

7 154.7

8 176.8

9 198.9

220

1 22.0

2 44.0

3 66.0

4 88.0

5 110.0

6 132.0

7 154.0

8 176.0

9 198.0

201

1 20.1

2 40.2

3 60.3

4 80.4

5 100.5

6 120.6

7 140.7

8 160.8

9 180.9

202

1 20.2

2 40.4

3 60.6

4 80.8

5 101.0

6 121.2

7 141.4

8 161.6

9 181.8

| i  | n  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d.  | i  |
|----|----|------------|-----|------------|-------|------------|------------|-----|----|
| 40 | 0  | 9.839 1396 | 220 | 9.979 7797 | 422   | 0.020 2203 | 9.859 3599 | 201 | 0  |
|    | 10 | 9.839 1616 | 221 | 9.979 8219 | 421   | 0.020 1781 | 9.859 3398 | 201 | 50 |
|    | 20 | 9.839 1837 | 221 | 9.979 8640 | 421   | 0.020 1360 | 9.859 3197 | 201 | 40 |
|    | 30 | 9.839 2058 | 220 | 9.979 9062 | 422   | 0.020 0938 | 9.859 2996 | 201 | 30 |
|    | 40 | 9.839 2278 | 221 | 9.979 9483 | 422   | 0.020 0517 | 9.859 2795 | 201 | 20 |
|    | 50 | 9.839 2499 | 220 | 9.979 9905 | 421   | 0.020 0095 | 9.859 2594 | 201 | 10 |
| 41 | 0  | 9.839 2719 | 220 | 9.980 0326 | 422   | 0.019 9674 | 9.859 2393 | 202 | 0  |
|    | 10 | 9.839 2939 | 221 | 9.980 0748 | 422   | 0.019 9252 | 9.859 2191 | 201 | 50 |
|    | 20 | 9.839 3160 | 220 | 9.980 1170 | 421   | 0.019 8830 | 9.859 1990 | 201 | 40 |
|    | 30 | 9.839 3380 | 221 | 9.980 1591 | 422   | 0.019 8409 | 9.859 1789 | 201 | 30 |
|    | 40 | 9.839 3601 | 220 | 9.980 2013 | 421   | 0.019 7987 | 9.859 1588 | 201 | 20 |
|    | 50 | 9.839 3821 | 220 | 9.980 2434 | 422   | 0.019 7566 | 9.859 1387 | 201 | 10 |
| 42 | 0  | 9.839 4041 | 221 | 9.980 2856 | 421   | 0.019 7144 | 9.859 1186 | 202 | 0  |
|    | 10 | 9.839 4262 | 220 | 9.980 3277 | 422   | 0.019 6723 | 9.859 0984 | 201 | 50 |
|    | 20 | 9.839 4482 | 220 | 9.980 3699 | 421   | 0.019 6301 | 9.859 0783 | 201 | 40 |
|    | 30 | 9.839 4702 | 221 | 9.980 4120 | 422   | 0.019 5880 | 9.859 0582 | 201 | 30 |
|    | 40 | 9.839 4923 | 220 | 9.980 4542 | 421   | 0.019 5458 | 9.859 0381 | 202 | 20 |
|    | 50 | 9.839 5143 | 220 | 9.980 4963 | 422   | 0.019 5037 | 9.859 0179 | 201 | 10 |
| 43 | 0  | 9.839 5363 | 220 | 9.980 5385 | 421   | 0.019 4615 | 9.858 9978 | 201 | 0  |
|    | 10 | 9.839 5583 | 220 | 9.980 5806 | 422   | 0.019 4194 | 9.858 9777 | 202 | 50 |
|    | 20 | 9.839 5803 | 220 | 9.980 6228 | 422   | 0.019 3772 | 9.858 9575 | 201 | 40 |
|    | 30 | 9.839 6023 | 221 | 9.980 6650 | 421   | 0.019 3350 | 9.858 9374 | 201 | 30 |
|    | 40 | 9.839 6244 | 220 | 9.980 7071 | 422   | 0.019 2929 | 9.858 9173 | 202 | 20 |
|    | 50 | 9.839 6464 | 220 | 9.980 7493 | 421   | 0.019 2507 | 9.858 8971 | 201 | 10 |
| 44 | 0  | 9.839 6684 | 220 | 9.980 7914 | 422   | 0.019 2086 | 9.858 8770 | 202 | 0  |
|    | 10 | 9.839 6904 | 220 | 9.980 8336 | 421   | 0.019 1664 | 9.858 8568 | 201 | 50 |
|    | 20 | 9.839 7124 | 220 | 9.980 8757 | 422   | 0.019 1243 | 9.858 8367 | 202 | 40 |
|    | 30 | 9.839 7344 | 220 | 9.980 9179 | 421   | 0.019 0821 | 9.858 8165 | 201 | 30 |
|    | 40 | 9.839 7564 | 220 | 9.980 9600 | 422   | 0.019 0400 | 9.858 7964 | 202 | 20 |
|    | 50 | 9.839 7784 | 220 | 9.981 0022 | 421   | 0.018 9978 | 9.858 7762 | 201 | 10 |
| 45 | 0  | 9.839 8004 | 220 | 9.981 0443 | 422   | 0.018 9557 | 9.858 7561 | 202 | 0  |
|    | 10 | 9.839 8224 | 220 | 9.981 0865 | 421   | 0.018 9135 | 9.858 7359 | 201 | 50 |
|    | 20 | 9.839 8444 | 220 | 9.981 1286 | 422   | 0.018 8714 | 9.858 7158 | 202 | 40 |
|    | 30 | 9.839 8664 | 219 | 9.981 1708 | 421   | 0.018 8292 | 9.858 6956 | 202 | 30 |
|    | 40 | 9.839 8883 | 220 | 9.981 2129 | 422   | 0.018 7871 | 9.858 6754 | 201 | 20 |
|    | 50 | 9.839 9103 | 220 | 9.981 2551 | 421   | 0.018 7449 | 9.858 6553 | 202 | 10 |
| 46 | 0  | 9.839 9323 | 220 | 9.981 2972 | 422   | 0.018 7028 | 9.858 6351 | 202 | 0  |
|    | 10 | 9.839 9543 | 220 | 9.981 3394 | 421   | 0.018 6606 | 9.858 6149 | 201 | 50 |
|    | 20 | 9.839 9763 | 219 | 9.981 3815 | 422   | 0.018 6185 | 9.858 5948 | 202 | 40 |
|    | 30 | 9.839 9982 | 220 | 9.981 4237 | 421   | 0.018 5763 | 9.858 5746 | 202 | 30 |
|    | 40 | 9.840 0202 | 220 | 9.981 4658 | 422   | 0.018 5342 | 9.858 5544 | 202 | 20 |
|    | 50 | 9.840 0422 | 220 | 9.981 5080 | 421   | 0.018 4920 | 9.858 5342 | 201 | 10 |
| 47 | 0  | 9.840 0642 | 219 | 9.981 5501 | 422   | 0.018 4499 | 9.858 5141 | 202 | 0  |
|    | 10 | 9.840 0861 | 220 | 9.981 5923 | 421   | 0.018 4077 | 9.858 4939 | 201 | 50 |
|    | 20 | 9.840 1081 | 220 | 9.981 6344 | 422   | 0.018 3656 | 9.858 4737 | 202 | 40 |
|    | 30 | 9.840 1301 | 219 | 9.981 6766 | 421   | 0.018 3234 | 9.858 4535 | 202 | 30 |
|    | 40 | 9.840 1520 | 220 | 9.981 7187 | 422   | 0.018 2813 | 9.858 4333 | 202 | 20 |
|    | 50 | 9.840 1740 | 219 | 9.981 7608 | 421   | 0.018 2392 | 9.858 4131 | 202 | 10 |
| 48 | 0  | 9.840 1959 | 220 | 9.981 8030 | 421   | 0.018 1970 | 9.858 3929 | 201 | 0  |
|    | 10 | 9.840 2179 | 219 | 9.981 8451 | 422   | 0.018 1549 | 9.858 3728 | 202 | 50 |
|    | 20 | 9.840 2398 | 220 | 9.981 8873 | 421   | 0.018 1127 | 9.858 3526 | 202 | 40 |
|    | 30 | 9.840 2618 | 219 | 9.981 9294 | 422   | 0.018 0706 | 9.858 3324 | 202 | 30 |
|    | 40 | 9.840 2837 | 220 | 9.981 9716 | 421   | 0.018 0284 | 9.858 3122 | 202 | 20 |
|    | 50 | 9.840 3057 | 219 | 9.982 0137 | 422   | 0.017 9863 | 9.858 2920 | 202 | 10 |
| 49 | 0  | 9.840 3276 | 220 | 9.982 0559 | 421   | 0.017 9441 | 9.858 2718 | 202 | 0  |
|    | 10 | 9.840 3496 | 219 | 9.982 0980 | 422   | 0.017 9020 | 9.858 2516 | 202 | 50 |
|    | 20 | 9.840 3715 | 220 | 9.982 1402 | 421   | 0.017 8598 | 9.858 2314 | 203 | 40 |
|    | 30 | 9.840 3935 | 219 | 9.982 1823 | 422   | 0.017 8177 | 9.858 2111 | 202 | 30 |
|    | 40 | 9.840 4154 | 220 | 9.982 2245 | 421   | 0.017 7755 | 9.858 1909 | 202 | 20 |
|    | 50 | 9.840 4373 | 219 | 9.982 2666 | 422   | 0.017 7334 | 9.858 1707 | 202 | 10 |
| 50 | 0  | 9.840 4593 | 220 | 9.982 3087 | 421   | 0.017 6913 | 9.858 1505 | 202 | 0  |
| i  | n  | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d.  | i  |



|    |    | Sin       | d.  | Tang       | d. c. | Cotg       | Con        | d.  |    |    |  |
|----|----|-----------|-----|------------|-------|------------|------------|-----|----|----|--|
| 50 | 0  | 0.8314696 | 319 | 0.983 3647 | 424   | 0.017 6913 | 9.858 1505 | 202 | 0  | 10 |  |
|    | 10 | 0.8315342 | 319 | 0.983 3799 | 424   | 0.017 6991 | 9.858 1303 | 202 | 50 |    |  |
|    | 20 | 0.8315988 | 319 | 0.983 3951 | 424   | 0.017 6070 | 9.858 1101 | 202 | 40 |    |  |
|    | 30 | 0.8316634 | 319 | 0.983 4103 | 424   | 0.017 5648 | 9.858 0899 | 202 | 30 |    |  |
|    | 40 | 0.8317280 | 319 | 0.983 4255 | 424   | 0.017 5227 | 9.858 0696 | 202 | 20 |    |  |
|    | 50 | 0.8317926 | 319 | 0.983 4407 | 424   | 0.017 4805 | 9.858 0494 | 202 | 10 |    |  |
| 51 | 0  | 0.8318572 | 319 | 0.983 4559 | 424   | 0.017 4384 | 9.858 0292 | 202 | 0  | 9  |  |
|    | 10 | 0.8319218 | 319 | 0.983 4711 | 424   | 0.017 3962 | 9.858 0090 | 202 | 50 |    |  |
|    | 20 | 0.8319864 | 319 | 0.983 4863 | 424   | 0.017 3541 | 9.857 9887 | 202 | 40 |    |  |
|    | 30 | 0.8320510 | 319 | 0.983 5015 | 424   | 0.017 3119 | 9.857 9685 | 202 | 30 |    |  |
|    | 40 | 0.8321156 | 319 | 0.983 5167 | 424   | 0.017 2698 | 9.857 9483 | 202 | 20 |    |  |
|    | 50 | 0.8321802 | 319 | 0.983 5319 | 424   | 0.017 2277 | 9.857 9280 | 202 | 10 |    |  |
| 52 | 0  | 0.8322448 | 319 | 0.983 5471 | 424   | 0.017 1855 | 9.857 9078 | 202 | 0  | 8  |  |
|    | 10 | 0.8323094 | 319 | 0.983 5623 | 424   | 0.017 1433 | 9.857 8876 | 202 | 50 |    |  |
|    | 20 | 0.8323740 | 319 | 0.983 5775 | 424   | 0.017 1012 | 9.857 8673 | 202 | 40 |    |  |
|    | 30 | 0.8324386 | 319 | 0.983 5927 | 424   | 0.017 0591 | 9.857 8471 | 202 | 30 |    |  |
|    | 40 | 0.8325032 | 319 | 0.983 6079 | 424   | 0.017 0169 | 9.857 8268 | 202 | 20 |    |  |
|    | 50 | 0.8325678 | 319 | 0.983 6231 | 424   | 0.016 9748 | 9.857 8066 | 202 | 10 |    |  |
| 53 | 0  | 0.8326324 | 319 | 0.983 6383 | 424   | 0.016 9327 | 9.857 7863 | 202 | 0  | 7  |  |
|    | 10 | 0.8326970 | 319 | 0.983 6535 | 424   | 0.016 8905 | 9.857 7661 | 202 | 50 |    |  |
|    | 20 | 0.8327616 | 319 | 0.983 6687 | 424   | 0.016 8484 | 9.857 7458 | 202 | 40 |    |  |
|    | 30 | 0.8328262 | 319 | 0.983 6839 | 424   | 0.016 8063 | 9.857 7256 | 202 | 30 |    |  |
|    | 40 | 0.8328908 | 319 | 0.983 6991 | 424   | 0.016 7641 | 9.857 7053 | 202 | 20 |    |  |
|    | 50 | 0.8329554 | 319 | 0.983 7143 | 424   | 0.016 7220 | 9.857 6851 | 202 | 10 |    |  |
| 54 | 0  | 0.8330200 | 319 | 0.983 7295 | 424   | 0.016 6798 | 9.857 6648 | 202 | 0  | 6  |  |
|    | 10 | 0.8330846 | 319 | 0.983 7447 | 424   | 0.016 6377 | 9.857 6445 | 202 | 50 |    |  |
|    | 20 | 0.8331492 | 319 | 0.983 7599 | 424   | 0.016 5955 | 9.857 6243 | 202 | 40 |    |  |
|    | 30 | 0.8332138 | 319 | 0.983 7751 | 424   | 0.016 5534 | 9.857 6040 | 202 | 30 |    |  |
|    | 40 | 0.8332784 | 319 | 0.983 7903 | 424   | 0.016 5113 | 9.857 5837 | 202 | 20 |    |  |
|    | 50 | 0.8333430 | 319 | 0.983 8055 | 424   | 0.016 4691 | 9.857 5635 | 202 | 10 |    |  |
| 55 | 0  | 0.8334076 | 319 | 0.983 8207 | 424   | 0.016 4270 | 9.857 5433 | 202 | 0  | 5  |  |
|    | 10 | 0.8334722 | 319 | 0.983 8359 | 424   | 0.016 3848 | 9.857 5230 | 202 | 50 |    |  |
|    | 20 | 0.8335368 | 319 | 0.983 8511 | 424   | 0.016 3427 | 9.857 5026 | 202 | 40 |    |  |
|    | 30 | 0.8336014 | 319 | 0.983 8663 | 424   | 0.016 3005 | 9.857 4824 | 202 | 30 |    |  |
|    | 40 | 0.8336660 | 319 | 0.983 8815 | 424   | 0.016 2584 | 9.857 4621 | 202 | 20 |    |  |
|    | 50 | 0.8337306 | 319 | 0.983 8967 | 424   | 0.016 2163 | 9.857 4418 | 202 | 10 |    |  |
| 56 | 0  | 0.8337952 | 319 | 0.983 9119 | 424   | 0.016 1741 | 9.857 4215 | 202 | 0  | 4  |  |
|    | 10 | 0.8338598 | 319 | 0.983 9271 | 424   | 0.016 1320 | 9.857 4013 | 202 | 50 |    |  |
|    | 20 | 0.8339244 | 319 | 0.983 9423 | 424   | 0.016 0898 | 9.857 3809 | 202 | 40 |    |  |
|    | 30 | 0.8339890 | 319 | 0.983 9575 | 424   | 0.016 0477 | 9.857 3606 | 202 | 30 |    |  |
|    | 40 | 0.8340536 | 319 | 0.983 9727 | 424   | 0.016 0056 | 9.857 3404 | 202 | 20 |    |  |
|    | 50 | 0.8341182 | 319 | 0.983 9879 | 424   | 0.015 9634 | 9.857 3201 | 202 | 10 |    |  |
| 57 | 0  | 0.8341828 | 319 | 0.983 9991 | 424   | 0.015 9213 | 9.857 2998 | 202 | 0  | 3  |  |
|    | 10 | 0.8342474 | 319 | 0.984 0143 | 424   | 0.015 8791 | 9.857 2795 | 202 | 50 |    |  |
|    | 20 | 0.8343120 | 319 | 0.984 0295 | 424   | 0.015 8370 | 9.857 2592 | 202 | 40 |    |  |
|    | 30 | 0.8343766 | 319 | 0.984 0447 | 424   | 0.015 7949 | 9.857 2389 | 202 | 30 |    |  |
|    | 40 | 0.8344412 | 319 | 0.984 0599 | 424   | 0.015 7527 | 9.857 2186 | 202 | 20 |    |  |
|    | 50 | 0.8345058 | 319 | 0.984 0751 | 424   | 0.015 7106 | 9.857 1983 | 202 | 10 |    |  |
| 58 | 0  | 0.8345704 | 319 | 0.984 0903 | 424   | 0.015 6685 | 9.857 1779 | 202 | 0  | 2  |  |
|    | 10 | 0.8346350 | 319 | 0.984 1055 | 424   | 0.015 6263 | 9.857 1576 | 202 | 50 |    |  |
|    | 20 | 0.8346996 | 319 | 0.984 1207 | 424   | 0.015 5843 | 9.857 1373 | 202 | 40 |    |  |
|    | 30 | 0.8347642 | 319 | 0.984 1359 | 424   | 0.015 5420 | 9.857 1170 | 202 | 30 |    |  |
|    | 40 | 0.8348288 | 319 | 0.984 1511 | 424   | 0.015 4999 | 9.857 0967 | 202 | 20 |    |  |
|    | 50 | 0.8348934 | 319 | 0.984 1663 | 424   | 0.015 4578 | 9.857 0764 | 202 | 10 |    |  |
| 59 | 0  | 0.8349580 | 319 | 0.984 1815 | 424   | 0.015 4156 | 9.857 0561 | 202 | 0  | 1  |  |
|    | 10 | 0.8350226 | 319 | 0.984 1967 | 424   | 0.015 3735 | 9.857 0357 | 202 | 50 |    |  |
|    | 20 | 0.8350872 | 319 | 0.984 2119 | 424   | 0.015 3314 | 9.857 0154 | 202 | 40 |    |  |
|    | 30 | 0.8351518 | 319 | 0.984 2271 | 424   | 0.015 2893 | 9.856 9951 | 202 | 30 |    |  |
|    | 40 | 0.8352164 | 319 | 0.984 2423 | 424   | 0.015 2471 | 9.856 9748 | 202 | 20 |    |  |
|    | 50 | 0.8352810 | 319 | 0.984 2575 | 424   | 0.015 2050 | 9.856 9544 | 202 | 10 |    |  |
| 60 | 0  | 0.8353456 | 319 | 0.984 2727 | 424   | 0.015 1628 | 9.856 9341 | 202 | 0  | 0  |  |

422  
1) 42.3  
2) 84.6  
3) 126.6  
4) 168.8  
5) 211.0  
6) 253.4  
7) 295.4  
8) 337.6  
9) 379.8

421  
1) 42.3  
2) 84.6  
3) 126.6  
4) 168.8  
5) 210.5  
6) 252.6  
7) 294.7  
8) 336.8  
9) 378.9

219  
1) 21.9  
2) 43.8  
3) 65.7  
4) 87.6  
5) 109.5  
6) 131.4  
7) 153.1  
8) 175.2  
9) 197.1

218  
1) 21.8  
2) 43.6  
3) 65.4  
4) 87.2  
5) 109.0  
6) 130.8  
7) 152.6  
8) 174.4  
9) 196.2

203  
1) 20.3  
2) 40.6  
3) 60.9  
4) 81.2  
5) 101.5  
6) 121.8  
7) 142.1  
8) 162.4  
9) 182.7

204  
1) 20.4  
2) 40.8  
3) 61.2  
4) 81.6  
5) 102.0  
6) 122.4  
7) 142.8  
8) 163.2  
9) 183.6



422

1 42.2  
2 42.4  
3 42.6  
4 42.8  
5 43.0  
6 43.2  
7 43.4  
8 43.6  
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421

1 42.7  
2 42.9  
3 43.1  
4 43.3  
5 43.5  
6 43.7  
7 43.9  
8 44.1  
9 44.3

218

1 21.8  
2 21.9  
3 22.0  
4 22.1  
5 22.2  
6 22.3  
7 22.4  
8 22.5  
9 22.6

217

1 21.7  
2 21.8  
3 21.9  
4 22.0  
5 22.1  
6 22.2  
7 22.3  
8 22.4  
9 22.5

203

1 20.3  
2 20.4  
3 20.5  
4 20.6  
5 20.7  
6 20.8  
7 20.9  
8 21.0  
9 21.1

204

1 20.4  
2 20.5  
3 20.6  
4 20.7  
5 20.8  
6 20.9  
7 21.0  
8 21.1  
9 21.2

|    | "  | Sin        | d.  | Tang       | d. c. | Cotg       | Cos        | d.  | "  |    |
|----|----|------------|-----|------------|-------|------------|------------|-----|----|----|
| 0  | 0  | 9.841 7713 | 218 | 9.984 8372 | 421   | 0.015 1628 | 9.856 9341 | 203 | 0  | 60 |
|    | 10 | 9.841 7931 | 218 | 9.984 8793 | 422   | 0.015 1207 | 9.856 9138 | 204 | 50 |    |
|    | 20 | 9.841 8149 | 218 | 9.984 9215 | 421   | 0.015 0785 | 9.856 8934 | 204 | 40 |    |
|    | 30 | 9.841 8367 | 218 | 9.984 9636 | 421   | 0.015 0364 | 9.856 8731 | 203 | 30 |    |
|    | 40 | 9.841 8585 | 218 | 9.985 0057 | 422   | 0.014 9943 | 9.856 8527 | 204 | 20 |    |
|    | 50 | 9.841 8803 | 218 | 9.985 0479 | 421   | 0.014 9521 | 9.856 8324 | 203 | 10 |    |
| 1  | 0  | 9.841 9021 | 217 | 9.985 0900 | 421   | 0.014 9100 | 9.856 8121 | 204 | 0  | 59 |
|    | 10 | 9.841 9238 | 218 | 9.985 1321 | 422   | 0.014 8679 | 9.856 7917 | 203 | 50 |    |
|    | 20 | 9.841 9456 | 218 | 9.985 1743 | 421   | 0.014 8257 | 9.856 7714 | 204 | 40 |    |
|    | 30 | 9.841 9674 | 218 | 9.985 2164 | 421   | 0.014 7836 | 9.856 7510 | 204 | 30 |    |
|    | 40 | 9.841 9892 | 218 | 9.985 2585 | 422   | 0.014 7415 | 9.856 7307 | 203 | 20 |    |
|    | 50 | 9.842 0110 | 218 | 9.985 3007 | 421   | 0.014 6993 | 9.856 7103 | 204 | 10 |    |
| 2  | 0  | 9.842 0328 | 217 | 9.985 3428 | 421   | 0.014 6572 | 9.856 6900 | 203 | 0  | 58 |
|    | 10 | 9.842 0545 | 218 | 9.985 3849 | 422   | 0.014 6151 | 9.856 6696 | 204 | 50 |    |
|    | 20 | 9.842 0763 | 218 | 9.985 4271 | 421   | 0.014 5729 | 9.856 6492 | 204 | 40 |    |
|    | 30 | 9.842 0981 | 218 | 9.985 4692 | 421   | 0.014 5308 | 9.856 6289 | 203 | 30 |    |
|    | 40 | 9.842 1199 | 217 | 9.985 5113 | 422   | 0.014 4887 | 9.856 6085 | 204 | 20 |    |
|    | 50 | 9.842 1416 | 218 | 9.985 5535 | 421   | 0.014 4465 | 9.856 5881 | 203 | 10 |    |
| 3  | 0  | 9.842 1634 | 218 | 9.985 5956 | 421   | 0.014 4044 | 9.856 5678 | 204 | 0  | 57 |
|    | 10 | 9.842 1852 | 217 | 9.985 6377 | 422   | 0.014 3623 | 9.856 5474 | 204 | 50 |    |
|    | 20 | 9.842 2069 | 218 | 9.985 6799 | 421   | 0.014 3201 | 9.856 5270 | 204 | 40 |    |
|    | 30 | 9.842 2287 | 217 | 9.985 7220 | 421   | 0.014 2780 | 9.856 5067 | 203 | 30 |    |
|    | 40 | 9.842 2504 | 218 | 9.985 7641 | 422   | 0.014 2359 | 9.856 4863 | 204 | 20 |    |
|    | 50 | 9.842 2722 | 217 | 9.985 8063 | 421   | 0.014 1937 | 9.856 4659 | 204 | 10 |    |
| 4  | 0  | 9.842 2939 | 218 | 9.985 8484 | 421   | 0.014 1516 | 9.856 4455 | 203 | 0  | 56 |
|    | 10 | 9.842 3157 | 217 | 9.985 8905 | 422   | 0.014 1095 | 9.856 4252 | 204 | 50 |    |
|    | 20 | 9.842 3374 | 218 | 9.985 9327 | 421   | 0.014 0673 | 9.856 4048 | 204 | 40 |    |
|    | 30 | 9.842 3592 | 217 | 9.985 9748 | 421   | 0.014 0252 | 9.856 3844 | 204 | 30 |    |
|    | 40 | 9.842 3809 | 218 | 9.986 0169 | 422   | 0.013 9831 | 9.856 3640 | 204 | 20 |    |
|    | 50 | 9.842 4027 | 217 | 9.986 0591 | 421   | 0.013 9409 | 9.856 3436 | 204 | 10 |    |
| 5  | 0  | 9.842 4244 | 218 | 9.986 1012 | 421   | 0.013 8988 | 9.856 3232 | 204 | 0  | 55 |
|    | 10 | 9.842 4462 | 217 | 9.986 1433 | 422   | 0.013 8567 | 9.856 3028 | 204 | 50 |    |
|    | 20 | 9.842 4679 | 217 | 9.986 1855 | 421   | 0.013 8145 | 9.856 2824 | 204 | 40 |    |
|    | 30 | 9.842 4896 | 218 | 9.986 2276 | 421   | 0.013 7724 | 9.856 2620 | 204 | 30 |    |
|    | 40 | 9.842 5114 | 217 | 9.986 2697 | 422   | 0.013 7303 | 9.856 2416 | 204 | 20 |    |
|    | 50 | 9.842 5331 | 217 | 9.986 3119 | 421   | 0.013 6881 | 9.856 2212 | 204 | 10 |    |
| 6  | 0  | 9.842 5548 | 217 | 9.986 3540 | 421   | 0.013 6460 | 9.856 2008 | 204 | 0  | 54 |
|    | 10 | 9.842 5765 | 218 | 9.986 3961 | 422   | 0.013 6039 | 9.856 1804 | 204 | 50 |    |
|    | 20 | 9.842 5983 | 217 | 9.986 4383 | 421   | 0.013 5617 | 9.856 1600 | 204 | 40 |    |
|    | 30 | 9.842 6200 | 217 | 9.986 4804 | 421   | 0.013 5196 | 9.856 1396 | 204 | 30 |    |
|    | 40 | 9.842 6417 | 217 | 9.986 5225 | 421   | 0.013 4775 | 9.856 1192 | 204 | 20 |    |
|    | 50 | 9.842 6634 | 217 | 9.986 5646 | 422   | 0.013 4354 | 9.856 0988 | 204 | 10 |    |
| 7  | 0  | 9.842 6851 | 218 | 9.986 6068 | 421   | 0.013 3932 | 9.856 0784 | 204 | 0  | 53 |
|    | 10 | 9.842 7069 | 217 | 9.986 6489 | 421   | 0.013 3511 | 9.856 0580 | 204 | 50 |    |
|    | 20 | 9.842 7286 | 217 | 9.986 6910 | 422   | 0.013 3090 | 9.856 0375 | 204 | 40 |    |
|    | 30 | 9.842 7503 | 217 | 9.986 7332 | 421   | 0.013 2668 | 9.856 0171 | 204 | 30 |    |
|    | 40 | 9.842 7720 | 217 | 9.986 7753 | 421   | 0.013 2247 | 9.855 9967 | 204 | 20 |    |
|    | 50 | 9.842 7937 | 217 | 9.986 8174 | 422   | 0.013 1826 | 9.855 9763 | 205 | 10 |    |
| 8  | 0  | 9.842 8154 | 217 | 9.986 8596 | 421   | 0.013 1404 | 9.855 9558 | 204 | 0  | 52 |
|    | 10 | 9.842 8371 | 217 | 9.986 9017 | 421   | 0.013 0983 | 9.855 9354 | 204 | 50 |    |
|    | 20 | 9.842 8588 | 217 | 9.986 9438 | 421   | 0.013 0562 | 9.855 9150 | 204 | 40 |    |
|    | 30 | 9.842 8805 | 217 | 9.986 9859 | 422   | 0.013 0141 | 9.855 8945 | 204 | 30 |    |
|    | 40 | 9.842 9022 | 217 | 9.987 0281 | 421   | 0.012 9719 | 9.855 8741 | 204 | 20 |    |
|    | 50 | 9.842 9239 | 217 | 9.987 0702 | 421   | 0.012 9298 | 9.855 8537 | 205 | 10 |    |
| 9  | 0  | 9.842 9456 | 217 | 9.987 1123 | 422   | 0.012 8877 | 9.855 8332 | 204 | 0  | 51 |
|    | 10 | 9.842 9673 | 216 | 9.987 1545 | 421   | 0.012 8455 | 9.855 8128 | 204 | 50 |    |
|    | 20 | 9.842 9889 | 217 | 9.987 1966 | 421   | 0.012 8034 | 9.855 7924 | 204 | 40 |    |
|    | 30 | 9.843 0106 | 217 | 9.987 2387 | 421   | 0.012 7613 | 9.855 7719 | 204 | 30 |    |
|    | 40 | 9.843 0323 | 217 | 9.987 2808 | 421   | 0.012 7192 | 9.855 7515 | 204 | 20 |    |
|    | 50 | 9.843 0540 | 217 | 9.987 3230 | 422   | 0.012 6770 | 9.855 7310 | 204 | 10 |    |
| 10 | 0  | 9.843 0757 | 217 | 9.987 3651 | 421   | 0.012 6349 | 9.855 7106 | 204 | 0  | 50 |
|    | "  | Cos        | d.  | Cotg       | d. c. | Tang       | Sin        | d.  | "  |    |



|    | Sin       | d.  | Tang      | d. c. | Cotg       | Cos        | d.  | "  |         |
|----|-----------|-----|-----------|-------|------------|------------|-----|----|---------|
| 10 | 0.9811713 | 110 | 0.9811713 | 4.1   | 0.012 6349 | 0.855 7106 | 205 | 0  | 50      |
| 11 | 0.9811713 | 110 | 0.9811713 | 4.1   | 0.012 5928 | 0.855 6901 | 204 | 50 | 422     |
| 12 | 0.9811713 | 110 | 0.9811713 | 4.1   | 0.012 5506 | 0.855 6697 | 204 | 40 | 1 42.3  |
| 13 | 0.9811713 | 110 | 0.9811713 | 4.1   | 0.012 5085 | 0.855 6492 | 205 | 30 | 1 81.4  |
| 14 | 0.9811713 | 110 | 0.9811713 | 4.1   | 0.012 4664 | 0.855 6287 | 205 | 20 | 1 126.6 |
| 15 | 0.9811713 | 110 | 0.9811713 | 4.1   | 0.012 4243 | 0.855 6083 | 204 | 10 | 1 168.8 |
| 16 | 0.9811713 | 110 | 0.9811713 | 4.1   | 0.012 3821 | 0.855 5878 | 205 | 0  | 1 211.0 |
| 17 | 0.9811713 | 110 | 0.9811713 | 4.1   | 0.012 3400 | 0.855 5674 | 204 | 50 | 1 253.2 |
| 18 | 0.9811713 | 110 | 0.9811713 | 4.1   | 0.012 2979 | 0.855 5469 | 205 | 40 | 1 295.4 |
| 19 | 0.9811713 | 110 | 0.9811713 | 4.1   | 0.012 2557 | 0.855 5264 | 205 | 30 | 1 337.6 |
| 20 | 0.9811713 | 110 | 0.9811713 | 4.1   | 0.012 2136 | 0.855 5060 | 204 | 20 | 1 379.8 |
| 21 | 0.9811713 | 110 | 0.9811713 | 4.1   | 0.012 1715 | 0.855 4855 | 205 | 10 |         |
| 22 | 0.9811713 | 110 | 0.9811713 | 4.1   | 0.012 1294 | 0.855 4650 | 205 | 0  | 421     |
| 23 | 0.9811713 | 110 | 0.9811713 | 4.1   | 0.012 0872 | 0.855 4445 | 204 | 50 | 1 42.1  |
| 24 | 0.9811713 | 110 | 0.9811713 | 4.1   | 0.012 0451 | 0.855 4241 | 205 | 40 | 1 82.2  |
| 25 | 0.9811713 | 110 | 0.9811713 | 4.1   | 0.012 0030 | 0.855 4036 | 205 | 30 | 1 126.1 |
| 26 | 0.9811713 | 110 | 0.9811713 | 4.1   | 0.011 9609 | 0.855 3831 | 205 | 20 | 1 168.1 |
| 27 | 0.9811713 | 110 | 0.9811713 | 4.1   | 0.011 9187 | 0.855 3626 | 205 | 10 | 1 210.5 |
| 28 | 0.9811713 | 110 | 0.9811713 | 4.1   | 0.011 8766 | 0.855 3421 | 204 | 0  | 1 252.6 |
| 29 | 0.9811713 | 110 | 0.9811713 | 4.1   | 0.011 8345 | 0.855 3216 | 205 | 50 | 1 294.7 |
| 30 | 0.9811713 | 110 | 0.9811713 | 4.1   | 0.011 7924 | 0.855 3011 | 205 | 40 | 1 336.8 |
| 31 | 0.9811713 | 110 | 0.9811713 | 4.1   | 0.011 7502 | 0.855 2806 | 205 | 30 | 1 378.9 |
| 32 | 0.9811713 | 110 | 0.9811713 | 4.1   | 0.011 7081 | 0.855 2601 | 204 | 20 |         |
| 33 | 0.9811713 | 110 | 0.9811713 | 4.1   | 0.011 6660 | 0.855 2397 | 205 | 10 | 216     |
| 34 | 0.9811713 | 110 | 0.9811713 | 4.1   | 0.011 6239 | 0.855 2192 | 205 | 0  | 1 21.4  |
| 35 | 0.9811713 | 110 | 0.9811713 | 4.1   | 0.011 5817 | 0.855 1987 | 205 | 50 | 1 43    |
| 36 | 0.9811713 | 110 | 0.9811713 | 4.1   | 0.011 5396 | 0.855 1782 | 205 | 40 | 1 64    |
| 37 | 0.9811713 | 110 | 0.9811713 | 4.1   | 0.011 4975 | 0.855 1577 | 205 | 30 | 1 86    |
| 38 | 0.9811713 | 110 | 0.9811713 | 4.1   | 0.011 4554 | 0.855 1371 | 205 | 20 | 1 108.0 |
| 39 | 0.9811713 | 110 | 0.9811713 | 4.1   | 0.011 4132 | 0.855 1166 | 205 | 10 | 1 130.6 |
| 40 | 0.9811713 | 110 | 0.9811713 | 4.1   | 0.011 3711 | 0.855 0961 | 205 | 0  | 1 151.2 |
| 41 | 0.9811713 | 110 | 0.9811713 | 4.1   | 0.011 3290 | 0.855 0756 | 204 | 50 | 1 171.8 |
| 42 | 0.9811713 | 110 | 0.9811713 | 4.1   | 0.011 2869 | 0.855 0551 | 205 | 40 | 1 194.4 |
| 43 | 0.9811713 | 110 | 0.9811713 | 4.1   | 0.011 2447 | 0.855 0346 | 205 | 30 |         |
| 44 | 0.9811713 | 110 | 0.9811713 | 4.1   | 0.011 2026 | 0.855 0141 | 205 | 20 | 216     |
| 45 | 0.9811713 | 110 | 0.9811713 | 4.1   | 0.011 1605 | 0.854 9935 | 205 | 10 | 1 21.5  |
| 46 | 0.9811713 | 110 | 0.9811713 | 4.1   | 0.011 1184 | 0.854 9730 | 205 | 0  | 1 43.0  |
| 47 | 0.9811713 | 110 | 0.9811713 | 4.1   | 0.011 0762 | 0.854 9525 | 205 | 50 | 1 64.5  |
| 48 | 0.9811713 | 110 | 0.9811713 | 4.1   | 0.011 0341 | 0.854 9320 | 205 | 40 | 1 86.0  |
| 49 | 0.9811713 | 110 | 0.9811713 | 4.1   | 0.011 0000 | 0.854 9114 | 205 | 30 | 1 107.5 |
| 50 | 0.9811713 | 110 | 0.9811713 | 4.1   | 0.010 9499 | 0.854 8909 | 205 | 20 | 1 129.0 |
| 51 | 0.9811713 | 110 | 0.9811713 | 4.1   | 0.010 8997 | 0.854 8704 | 205 | 10 | 1 150.5 |
| 52 | 0.9811713 | 110 | 0.9811713 | 4.1   | 0.010 8496 | 0.854 8499 | 206 | 0  | 1 171.0 |
| 53 | 0.9811713 | 110 | 0.9811713 | 4.1   | 0.010 7994 | 0.854 8294 | 205 | 50 | 1 193.5 |
| 54 | 0.9811713 | 110 | 0.9811713 | 4.1   | 0.010 7493 | 0.854 8088 | 205 | 40 |         |
| 55 | 0.9811713 | 110 | 0.9811713 | 4.1   | 0.010 6991 | 0.854 7883 | 206 | 30 | 205     |
| 56 | 0.9811713 | 110 | 0.9811713 | 4.1   | 0.010 6490 | 0.854 7677 | 205 | 20 | 1 20.5  |
| 57 | 0.9811713 | 110 | 0.9811713 | 4.1   | 0.010 5988 | 0.854 7472 | 206 | 10 | 1 41.0  |
| 58 | 0.9811713 | 110 | 0.9811713 | 4.1   | 0.010 5487 | 0.854 7266 | 205 | 0  | 1 61.5  |
| 59 | 0.9811713 | 110 | 0.9811713 | 4.1   | 0.010 4985 | 0.854 7061 | 206 | 50 | 1 82.4  |
| 60 | 0.9811713 | 110 | 0.9811713 | 4.1   | 0.010 4484 | 0.854 6855 | 205 | 40 | 1 103.0 |
| 61 | 0.9811713 | 110 | 0.9811713 | 4.1   | 0.010 3983 | 0.854 6650 | 205 | 30 | 1 123.5 |
| 62 | 0.9811713 | 110 | 0.9811713 | 4.1   | 0.010 3481 | 0.854 6444 | 206 | 20 | 1 143.5 |
| 63 | 0.9811713 | 110 | 0.9811713 | 4.1   | 0.010 2980 | 0.854 6238 | 206 | 10 | 1 164.0 |
| 64 | 0.9811713 | 110 | 0.9811713 | 4.1   | 0.010 2479 | 0.854 6033 | 206 | 0  | 1 184.5 |
| 65 | 0.9811713 | 110 | 0.9811713 | 4.1   | 0.010 1977 | 0.854 5827 | 205 | 50 |         |
| 66 | 0.9811713 | 110 | 0.9811713 | 4.1   | 0.010 1476 | 0.854 5622 | 205 | 40 | 206     |
| 67 | 0.9811713 | 110 | 0.9811713 | 4.1   | 0.010 1000 | 0.854 5416 | 206 | 30 | 1 20.6  |
| 68 | 0.9811713 | 110 | 0.9811713 | 4.1   | 0.010 0500 | 0.854 5210 | 206 | 20 | 1 41.0  |
| 69 | 0.9811713 | 110 | 0.9811713 | 4.1   | 0.010 0000 | 0.854 5005 | 206 | 10 | 1 61.5  |
| 70 | 0.9811713 | 110 | 0.9811713 | 4.1   | 0.010 0000 | 0.854 4799 | 206 | 0  | 1 82.4  |



|         |    | Sin          | d.  | Tang       | d. c. | Cotg       | Cos        | d.  |    |    |
|---------|----|--------------|-----|------------|-------|------------|------------|-----|----|----|
| 422     | 20 | 0 9.844 3725 | 215 | 9.989 8926 | 421   | 0.010 1074 | 9.854 4799 | 206 | 0  | 40 |
| 1 42.1  | 10 | 9.844 3940   | 216 | 9.989 9347 | 421   | 0.010 0653 | 9.854 4593 | 205 | 50 |    |
| 2 84.4  | 20 | 9.844 4156   | 216 | 9.989 9768 | 421   | 0.010 0232 | 9.854 4388 | 205 | 40 |    |
| 3 126.6 | 30 | 9.844 4371   | 215 | 9.990 0190 | 422   | 0.009 9810 | 9.854 4182 | 206 | 30 |    |
| 4 168.8 | 40 | 9.844 4587   | 215 | 9.990 0611 | 421   | 0.009 9389 | 9.854 3976 | 206 | 20 |    |
| 5 211.0 | 50 | 9.844 4802   | 216 | 9.990 1032 | 421   | 0.009 8968 | 9.854 3770 | 206 | 10 |    |
| 6 253.2 | 21 | 0 9.844 5018 | 215 | 9.990 1453 | 421   | 0.009 8547 | 9.854 3564 | 205 | 0  | 39 |
| 7 295.4 | 10 | 9.844 5233   | 215 | 9.990 1874 | 422   | 0.009 8126 | 9.854 3359 | 206 | 50 |    |
| 8 337.6 | 20 | 9.844 5448   | 216 | 9.990 2296 | 421   | 0.009 7704 | 9.854 3153 | 206 | 40 |    |
| 9 379.8 | 30 | 9.844 5664   | 215 | 9.990 2717 | 421   | 0.009 7283 | 9.854 2947 | 206 | 30 |    |
|         | 40 | 9.844 5879   | 215 | 9.990 3138 | 421   | 0.009 6862 | 9.854 2741 | 206 | 20 |    |
|         | 50 | 9.844 6094   | 216 | 9.990 3559 | 421   | 0.009 6441 | 9.854 2535 | 206 | 10 |    |
| 421     | 22 | 0 9.844 6310 | 215 | 9.990 3981 | 421   | 0.009 6019 | 9.854 2329 | 206 | 0  | 38 |
| 1 42.1  | 10 | 9.844 6525   | 215 | 9.990 4402 | 421   | 0.009 5598 | 9.854 2123 | 206 | 50 |    |
| 2 84.2  | 20 | 9.844 6740   | 215 | 9.990 4823 | 421   | 0.009 5177 | 9.854 1917 | 206 | 40 |    |
| 3 126.3 | 30 | 9.844 6955   | 215 | 9.990 5244 | 421   | 0.009 4756 | 9.854 1711 | 206 | 30 |    |
| 4 168.4 | 40 | 9.844 7170   | 216 | 9.990 5665 | 422   | 0.009 4335 | 9.854 1505 | 206 | 20 |    |
| 5 210.5 | 50 | 9.844 7386   | 215 | 9.990 6087 | 421   | 0.009 3913 | 9.854 1299 | 206 | 10 |    |
| 6 252.6 | 23 | 0 9.844 7601 | 215 | 9.990 6508 | 421   | 0.009 3492 | 9.854 1093 | 206 | 0  | 37 |
| 7 294.7 | 10 | 9.844 7816   | 215 | 9.990 6929 | 421   | 0.009 3071 | 9.854 0887 | 206 | 50 |    |
| 8 336.8 | 20 | 9.844 8031   | 215 | 9.990 7350 | 421   | 0.009 2650 | 9.854 0681 | 206 | 40 |    |
| 9 378.9 | 30 | 9.844 8246   | 215 | 9.990 7771 | 421   | 0.009 2229 | 9.854 0475 | 206 | 30 |    |
|         | 40 | 9.844 8461   | 215 | 9.990 8193 | 421   | 0.009 1807 | 9.854 0269 | 207 | 20 |    |
|         | 50 | 9.844 8676   | 215 | 9.990 8614 | 421   | 0.009 1386 | 9.854 0062 | 207 | 10 |    |
| 216     | 24 | 0 9.844 8891 | 215 | 9.990 9035 | 421   | 0.009 0965 | 9.853 9856 | 206 | 0  | 36 |
| 1 21.6  | 10 | 9.844 9106   | 215 | 9.990 9456 | 421   | 0.009 0544 | 9.853 9650 | 206 | 50 |    |
| 2 43.2  | 20 | 9.844 9321   | 215 | 9.990 9877 | 422   | 0.009 0123 | 9.853 9444 | 206 | 40 |    |
| 3 64.8  | 30 | 9.844 9536   | 215 | 9.991 0299 | 421   | 0.008 9701 | 9.853 9238 | 207 | 30 |    |
| 4 86.4  | 40 | 9.844 9751   | 215 | 9.991 0720 | 421   | 0.008 9280 | 9.853 9031 | 206 | 20 |    |
| 5 108.0 | 50 | 9.844 9966   | 215 | 9.991 1141 | 421   | 0.008 8859 | 9.853 8825 | 206 | 10 |    |
| 6 129.6 | 25 | 0 9.845 0181 | 215 | 9.991 1562 | 421   | 0.008 8438 | 9.853 8619 | 207 | 0  | 35 |
| 7 151.2 | 10 | 9.845 0396   | 215 | 9.991 1983 | 421   | 0.008 8017 | 9.853 8412 | 206 | 50 |    |
| 8 172.8 | 20 | 9.845 0611   | 215 | 9.991 2404 | 421   | 0.008 7596 | 9.853 8206 | 206 | 40 |    |
| 9 194.4 | 30 | 9.845 0825   | 215 | 9.991 2826 | 421   | 0.008 7174 | 9.853 8000 | 207 | 30 |    |
|         | 40 | 9.845 1040   | 215 | 9.991 3247 | 421   | 0.008 6753 | 9.853 7793 | 206 | 20 |    |
|         | 50 | 9.845 1255   | 215 | 9.991 3668 | 421   | 0.008 6332 | 9.853 7587 | 206 | 10 |    |
| 215     | 26 | 0 9.845 1470 | 215 | 9.991 4089 | 421   | 0.008 5911 | 9.853 7381 | 207 | 0  | 34 |
| 1 21.5  | 10 | 9.845 1685   | 214 | 9.991 4510 | 421   | 0.008 5490 | 9.853 7174 | 206 | 50 |    |
| 2 43.0  | 20 | 9.845 1899   | 215 | 9.991 4932 | 422   | 0.008 5068 | 9.853 6968 | 206 | 40 |    |
| 3 64.5  | 30 | 9.845 2114   | 215 | 9.991 5353 | 421   | 0.008 4647 | 9.853 6761 | 206 | 30 |    |
| 4 86.0  | 40 | 9.845 2329   | 214 | 9.991 5774 | 421   | 0.008 4226 | 9.853 6555 | 207 | 20 |    |
| 5 107.5 | 50 | 9.845 2543   | 215 | 9.991 6195 | 421   | 0.008 3805 | 9.853 6348 | 206 | 10 |    |
| 6 129.0 | 27 | 0 9.845 2758 | 215 | 9.991 6616 | 422   | 0.008 3384 | 9.853 6142 | 207 | 0  | 33 |
| 7 150.5 | 10 | 9.845 2973   | 214 | 9.991 7038 | 421   | 0.008 2962 | 9.853 5935 | 206 | 50 |    |
| 8 172.0 | 20 | 9.845 3187   | 215 | 9.991 7459 | 421   | 0.008 2541 | 9.853 5729 | 207 | 40 |    |
| 9 193.5 | 30 | 9.845 3402   | 214 | 9.991 7880 | 421   | 0.008 2120 | 9.853 5522 | 207 | 30 |    |
|         | 40 | 9.845 3616   | 215 | 9.991 8301 | 421   | 0.008 1699 | 9.853 5315 | 206 | 20 |    |
|         | 50 | 9.845 3831   | 214 | 9.991 8722 | 421   | 0.008 1278 | 9.853 5109 | 207 | 10 |    |
| 205     | 28 | 0 9.845 4045 | 215 | 9.991 9143 | 422   | 0.008 0857 | 9.853 4902 | 207 | 0  | 32 |
| 1 20.5  | 10 | 9.845 4260   | 214 | 9.991 9565 | 421   | 0.008 0435 | 9.853 4695 | 206 | 50 |    |
| 2 41.0  | 20 | 9.845 4474   | 215 | 9.991 9986 | 421   | 0.008 0014 | 9.853 4489 | 207 | 40 |    |
| 3 61.5  | 30 | 9.845 4689   | 214 | 9.992 0407 | 421   | 0.007 9593 | 9.853 4282 | 207 | 30 |    |
| 4 82.0  | 40 | 9.845 4903   | 215 | 9.992 0828 | 421   | 0.007 9172 | 9.853 4075 | 207 | 20 |    |
| 5 102.5 | 50 | 9.845 5118   | 214 | 9.992 1249 | 421   | 0.007 8751 | 9.853 3868 | 206 | 10 |    |
| 6 123.0 | 29 | 0 9.845 5332 | 214 | 9.992 1670 | 422   | 0.007 8330 | 9.853 3662 | 207 | 0  | 31 |
| 7 143.5 | 10 | 9.845 5546   | 215 | 9.992 2092 | 421   | 0.007 7908 | 9.853 3455 | 207 | 50 |    |
| 8 164.0 | 20 | 9.845 5761   | 214 | 9.992 2513 | 421   | 0.007 7487 | 9.853 3248 | 207 | 40 |    |
| 9 185.4 | 30 | 9.845 5975   | 214 | 9.992 2934 | 421   | 0.007 7066 | 9.853 3041 | 207 | 30 |    |
|         | 40 | 9.845 6189   | 215 | 9.992 3355 | 421   | 0.007 6645 | 9.853 2834 | 207 | 20 |    |
|         | 50 | 9.845 6404   | 214 | 9.992 3776 | 421   | 0.007 6224 | 9.853 2627 | 206 | 10 |    |
|         | 30 | 0 9.845 6618 | 214 | 9.992 4197 | 421   | 0.007 5803 | 9.853 2421 | 207 | 0  | 30 |
|         |    |              |     |            |       |            |            |     |    |    |
|         |    | Cos          | d.  | Cotg       | d. c. | Tang       | Sin        | d.  |    |    |







|    | 8In | Tong | Cut | Co. | A   |    |
|----|-----|------|-----|-----|-----|----|
| 40 | ... | ...  | ... | ... | ... | 20 |
| 41 | ... | ...  | ... | ... | ... | 19 |
| 42 | ... | ...  | ... | ... | ... | 18 |
| 43 | ... | ...  | ... | ... | ... | 17 |
| 44 | ... | ...  | ... | ... | ... | 16 |
| 45 | ... | ...  | ... | ... | ... | 15 |
| 46 | ... | ...  | ... | ... | ... | 14 |
| 47 | ... | ...  | ... | ... | ... | 13 |
| 48 | ... | ...  | ... | ... | ... | 12 |
| 49 | ... | ...  | ... | ... | ... | 11 |
| 50 | ... | ...  | ... | ... | ... | 10 |











## APPENDIX.

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1. TABLE FOR THE CONVERSION OF SIDEREAL TIME  
INTO MEAN TIME.
2. TABLE FOR THE CONVERSION OF MEAN TIME  
INTO SIDEREAL TIME.
3. TABLES OF REFRACTION.
4. CONSTANTS.







| 1 <sup>st</sup> |    | 2 <sup>nd</sup> |    | 3 <sup>rd</sup> |    | 4 <sup>th</sup> |    | 5 <sup>th</sup> |    | 6 <sup>th</sup> |    | 7 <sup>th</sup> |    | 8 <sup>th</sup> |    | 9 <sup>th</sup> |    | 10 <sup>th</sup> |    | 11 <sup>th</sup> |    | 12 <sup>th</sup> |    |
|-----------------|----|-----------------|----|-----------------|----|-----------------|----|-----------------|----|-----------------|----|-----------------|----|-----------------|----|-----------------|----|------------------|----|------------------|----|------------------|----|
| h               | m  | h               | m  | h               | m  | h               | m  | h               | m  | h               | m  | h               | m  | h               | m  | h               | m  | h                | m  | h                | m  | h                | m  |
| 1               | 0  | 1               | 0  | 2               | 0  | 3               | 0  | 4               | 0  | 5               | 0  | 6               | 0  | 7               | 0  | 8               | 0  | 9                | 0  | 10               | 0  | 11               | 0  |
| 1               | 1  | 1               | 1  | 2               | 1  | 3               | 1  | 4               | 1  | 5               | 1  | 6               | 1  | 7               | 1  | 8               | 1  | 9                | 1  | 10               | 1  | 11               | 1  |
| 1               | 2  | 1               | 2  | 2               | 2  | 3               | 2  | 4               | 2  | 5               | 2  | 6               | 2  | 7               | 2  | 8               | 2  | 9                | 2  | 10               | 2  | 11               | 2  |
| 1               | 3  | 1               | 3  | 2               | 3  | 3               | 3  | 4               | 3  | 5               | 3  | 6               | 3  | 7               | 3  | 8               | 3  | 9                | 3  | 10               | 3  | 11               | 3  |
| 1               | 4  | 1               | 4  | 2               | 4  | 3               | 4  | 4               | 4  | 5               | 4  | 6               | 4  | 7               | 4  | 8               | 4  | 9                | 4  | 10               | 4  | 11               | 4  |
| 1               | 5  | 1               | 5  | 2               | 5  | 3               | 5  | 4               | 5  | 5               | 5  | 6               | 5  | 7               | 5  | 8               | 5  | 9                | 5  | 10               | 5  | 11               | 5  |
| 1               | 6  | 1               | 6  | 2               | 6  | 3               | 6  | 4               | 6  | 5               | 6  | 6               | 6  | 7               | 6  | 8               | 6  | 9                | 6  | 10               | 6  | 11               | 6  |
| 1               | 7  | 1               | 7  | 2               | 7  | 3               | 7  | 4               | 7  | 5               | 7  | 6               | 7  | 7               | 7  | 8               | 7  | 9                | 7  | 10               | 7  | 11               | 7  |
| 1               | 8  | 1               | 8  | 2               | 8  | 3               | 8  | 4               | 8  | 5               | 8  | 6               | 8  | 7               | 8  | 8               | 8  | 9                | 8  | 10               | 8  | 11               | 8  |
| 1               | 9  | 1               | 9  | 2               | 9  | 3               | 9  | 4               | 9  | 5               | 9  | 6               | 9  | 7               | 9  | 8               | 9  | 9                | 9  | 10               | 9  | 11               | 9  |
| 1               | 10 | 1               | 10 | 2               | 10 | 3               | 10 | 4               | 10 | 5               | 10 | 6               | 10 | 7               | 10 | 8               | 10 | 10               | 10 | 10               | 10 | 11               | 10 |
| 1               | 11 | 1               | 11 | 2               | 11 | 3               | 11 | 4               | 11 | 5               | 11 | 6               | 11 | 7               | 11 | 8               | 11 | 10               | 11 | 10               | 10 | 11               | 11 |
| 1               | 12 | 1               | 12 | 2               | 12 | 3               | 12 | 4               | 12 | 5               | 12 | 6               | 12 | 7               | 12 | 8               | 11 | 10               | 11 | 10               | 10 | 11               | 12 |
| 2               | 0  | 2               | 0  | 3               | 0  | 4               | 0  | 5               | 0  | 6               | 0  | 7               | 0  | 8               | 0  | 9               | 0  | 10               | 0  | 11               | 0  | 12               | 0  |
| 2               | 1  | 2               | 1  | 3               | 1  | 4               | 1  | 5               | 1  | 6               | 1  | 7               | 1  | 8               | 1  | 9               | 1  | 10               | 1  | 11               | 1  | 12               | 1  |
| 2               | 2  | 2               | 2  | 3               | 2  | 4               | 2  | 5               | 2  | 6               | 2  | 7               | 2  | 8               | 2  | 9               | 2  | 10               | 2  | 11               | 2  | 12               | 2  |
| 2               | 3  | 2               | 3  | 3               | 3  | 4               | 3  | 5               | 3  | 6               | 3  | 7               | 3  | 8               | 3  | 9               | 3  | 10               | 3  | 11               | 3  | 12               | 3  |
| 2               | 4  | 2               | 4  | 3               | 4  | 4               | 4  | 5               | 4  | 6               | 4  | 7               | 4  | 8               | 4  | 9               | 4  | 10               | 4  | 11               | 4  | 12               | 4  |
| 2               | 5  | 2               | 5  | 3               | 5  | 4               | 5  | 5               | 5  | 6               | 5  | 7               | 5  | 8               | 5  | 9               | 5  | 10               | 5  | 11               | 5  | 12               | 5  |
| 2               | 6  | 2               | 6  | 3               | 6  | 4               | 6  | 5               | 6  | 6               | 6  | 7               | 6  | 8               | 6  | 9               | 6  | 10               | 6  | 11               | 6  | 12               | 6  |
| 2               | 7  | 2               | 7  | 3               | 7  | 4               | 7  | 5               | 7  | 6               | 7  | 7               | 7  | 8               | 7  | 9               | 7  | 10               | 7  | 11               | 7  | 12               | 7  |
| 2               | 8  | 2               | 8  | 3               | 8  | 4               | 8  | 5               | 8  | 6               | 8  | 7               | 8  | 8               | 8  | 9               | 8  | 10               | 8  | 11               | 8  | 12               | 8  |
| 2               | 9  | 2               | 9  | 3               | 9  | 4               | 9  | 5               | 9  | 6               | 9  | 7               | 9  | 8               | 9  | 9               | 9  | 10               | 9  | 11               | 9  | 12               | 9  |
| 2               | 10 | 2               | 10 | 3               | 10 | 4               | 10 | 5               | 10 | 6               | 10 | 7               | 10 | 8               | 10 | 9               | 10 | 10               | 10 | 10               | 10 | 12               | 10 |
| 2               | 11 | 2               | 11 | 3               | 11 | 4               | 11 | 5               | 11 | 6               | 11 | 7               | 11 | 8               | 11 | 9               | 10 | 10               | 10 | 10               | 10 | 11               | 11 |
| 2               | 12 | 2               | 12 | 3               | 12 | 4               | 12 | 5               | 12 | 6               | 12 | 7               | 12 | 8               | 12 | 9               | 10 | 10               | 10 | 10               | 10 | 11               | 12 |
| 3               | 0  | 3               | 0  | 4               | 0  | 5               | 0  | 6               | 0  | 7               | 0  | 8               | 0  | 9               | 0  | 10              | 0  | 11               | 0  | 12               | 0  | 13               | 0  |
| 3               | 1  | 3               | 1  | 4               | 1  | 5               | 1  | 6               | 1  | 7               | 1  | 8               | 1  | 9               | 1  | 10              | 1  | 11               | 1  | 12               | 1  | 13               | 1  |
| 3               | 2  | 3               | 2  | 4               | 2  | 5               | 2  | 6               | 2  | 7               | 2  | 8               | 2  | 9               | 2  | 10              | 2  | 11               | 2  | 12               | 2  | 13               | 2  |
| 3               | 3  | 3               | 3  | 4               | 3  | 5               | 3  | 6               | 3  | 7               | 3  | 8               | 3  | 9               | 3  | 10              | 3  | 11               | 3  | 12               | 3  | 13               | 3  |
| 3               | 4  | 3               | 4  | 4               | 4  | 5               | 4  | 6               | 4  | 7               | 4  | 8               | 4  | 9               | 4  | 10              | 4  | 11               | 4  | 12               | 4  | 13               | 4  |
| 3               | 5  | 3               | 5  | 4               | 5  | 5               | 5  | 6               | 5  | 7               | 5  | 8               | 5  | 9               | 5  | 10              | 5  | 11               | 5  | 12               | 5  | 13               | 5  |
| 3               | 6  | 3               | 6  | 4               | 6  | 5               | 6  | 6               | 6  | 7               | 6  | 8               | 6  | 9               | 6  | 10              | 6  | 11               | 6  | 12               | 6  | 13               | 6  |
| 3               | 7  | 3               | 7  | 4               | 7  | 5               | 7  | 6               | 7  | 7               | 7  | 8               | 7  | 9               | 7  | 10              | 7  | 11               | 7  | 12               | 7  | 13               | 7  |
| 3               | 8  | 3               | 8  | 4               | 8  | 5               | 8  | 6               | 8  | 7               | 8  | 8               | 8  | 9               | 8  | 10              | 8  | 11               | 8  | 12               | 8  | 13               | 8  |
| 3               | 9  | 3               | 9  | 4               | 9  | 5               | 9  | 6               | 9  | 7               | 9  | 8               | 9  | 9               | 9  | 10              | 9  | 11               | 9  | 12               | 9  | 13               | 9  |
| 3               | 10 | 3               | 10 | 4               | 10 | 5               | 10 | 6               | 10 | 7               | 10 | 8               | 10 | 9               | 10 | 10              | 10 | 10               | 10 | 10               | 10 | 13               | 10 |
| 3               | 11 | 3               | 11 | 4               | 11 | 5               | 11 | 6               | 11 | 7               | 11 | 8               | 11 | 9               | 11 | 10              | 10 | 10               | 10 | 10               | 10 | 11               | 11 |
| 3               | 12 | 3               | 12 | 4               | 12 | 5               | 12 | 6               | 12 | 7               | 12 | 8               | 12 | 9               | 12 | 10              | 10 | 10               | 10 | 10               | 10 | 11               | 12 |
| 4               | 0  | 4               | 0  | 5               | 0  | 6               | 0  | 7               | 0  | 8               | 0  | 9               | 0  | 10              | 0  | 11              | 0  | 12               | 0  | 13               | 0  | 14               | 0  |
| 4               | 1  | 4               | 1  | 5               | 1  | 6               | 1  | 7               | 1  | 8               | 1  | 9               | 1  | 10              | 1  | 11              | 1  | 12               | 1  | 13               | 1  | 14               | 1  |
| 4               | 2  | 4               | 2  | 5               | 2  | 6               | 2  | 7               | 2  | 8               | 2  | 9               | 2  | 10              | 2  | 11              | 2  | 12               | 2  | 13               | 2  | 14               | 2  |
| 4               | 3  | 4               | 3  | 5               | 3  | 6               | 3  | 7               | 3  | 8               | 3  | 9               | 3  | 10              | 3  | 11              | 3  | 12               | 3  | 13               | 3  | 14               | 3  |
| 4               | 4  | 4               | 4  | 5               | 4  | 6               | 4  | 7               | 4  | 8               | 4  | 9               | 4  | 10              | 4  | 11              | 4  | 12               | 4  | 13               | 4  | 14               | 4  |
| 4               | 5  | 4               | 5  | 5               | 5  | 6               | 5  | 7               | 5  | 8               | 5  | 9               | 5  | 10              | 5  | 11              | 5  | 12               | 5  | 13               | 5  | 14               | 5  |
| 4               | 6  | 4               | 6  | 5               | 6  | 6               | 6  | 7               | 6  | 8               | 6  | 9               | 6  | 10              | 6  | 11              | 6  | 12               | 6  | 13               | 6  | 14               | 6  |
| 4               | 7  | 4               | 7  | 5               | 7  | 6               | 7  | 7               | 7  | 8               | 7  | 9               | 7  | 10              | 7  | 11              | 7  | 12               | 7  | 13               | 7  | 14               | 7  |
| 4               | 8  | 4               | 8  | 5               | 8  | 6               | 8  | 7               | 8  | 8               | 8  | 9               | 8  | 10              | 8  | 11              | 8  | 12               | 8  | 13               | 8  | 14               | 8  |
| 4               | 9  | 4               | 9  | 5               | 9  | 6               | 9  | 7               | 9  | 8               | 9  | 9               | 9  | 10              | 9  | 11              | 9  | 12               | 9  | 13               | 9  | 14               | 9  |
| 4               | 10 | 4               | 10 | 5               | 10 | 6               | 10 | 7               | 10 | 8               | 10 | 9               | 10 | 10              | 10 | 10              | 10 | 10               | 10 | 10               | 10 | 14               | 10 |
| 4               | 11 | 4               | 11 | 5               | 11 | 6               | 11 | 7               | 11 | 8               | 11 | 9               | 11 | 10              | 10 | 10              | 10 | 10               | 10 | 10               | 10 | 11               | 11 |
| 4               | 12 | 4               | 12 | 5               | 12 | 6               | 12 | 7               | 12 | 8               | 12 | 9               | 12 | 10              | 10 | 10              | 10 | 10               | 10 | 10               | 10 | 11               | 12 |
| 5               | 0  | 5               | 0  | 6               | 0  | 7               | 0  | 8               | 0  | 9               | 0  | 10              | 0  | 11              | 0  | 12              | 0  | 13               | 0  | 14               | 0  | 15               | 0  |
| 5               | 1  | 5               | 1  | 6               | 1  | 7               | 1  | 8               | 1  | 9               | 1  | 10              | 1  | 11              | 1  | 12              | 1  | 13               | 1  | 14               | 1  | 15               | 1  |
| 5               | 2  | 5               | 2  | 6               | 2  | 7               | 2  | 8               | 2  | 9               | 2  | 10              | 2  | 11              | 2  | 12              | 2  | 13               | 2  | 14               | 2  | 15               | 2  |
| 5               | 3  | 5               | 3  | 6               | 3  | 7               | 3  | 8               | 3  | 9               | 3  | 10              | 3  | 11              | 3  | 12              | 3  | 13               | 3  | 14               | 3  | 15               | 3  |
| 5               | 4  | 5               | 4  | 6               | 4  | 7               | 4  | 8               | 4  | 9               | 4  | 10              | 4  | 11              | 4  | 12              | 4  | 13               | 4  | 14               | 4  | 15               | 4  |
| 5               | 5  | 5               | 5  | 6               | 5  | 7               | 5  | 8               | 5  | 9               | 5  | 10              | 5  | 11              | 5  | 12              | 5  | 13               | 5  | 14               | 5  | 15               | 5  |
| 5               | 6  | 5               | 6  | 6               | 6  | 7               | 6  | 8               | 6  | 9               | 6  | 10              | 6  | 11              | 6  | 12              | 6  | 13               | 6  | 14               | 6  | 15               | 6  |
| 5               | 7  | 5               | 7  | 6               | 7  | 7               | 7  | 8               | 7  | 9               | 7  | 10              | 7  | 11              | 7  | 12              | 7  | 13               | 7  | 14               | 7  | 15               | 7  |
| 5               | 8  | 5               | 8  | 6               | 8  | 7               | 8  | 8               | 8  | 9               | 8  | 10              | 8  | 11              | 8  | 12              | 8  | 13               | 8  | 14               | 8  | 15               | 8  |
| 5               | 9  | 5               | 9  | 6               | 9  | 7               | 9  | 8               | 9  | 9               | 9  | 10              | 9  | 11              | 9  | 12              | 9  | 13               | 9  | 14               | 9  | 15               | 9  |
| 5               | 10 | 5               | 10 | 6               | 10 | 7               | 10 | 8               | 10 | 9               | 10 | 10              | 10 | 10              | 10 | 10              | 10 | 10               | 10 | 10               | 10 | 15               | 10 |
| 5               | 11 | 5               | 11 | 6               | 11 | 7               | 11 | 8               | 11 | 9               | 11 | 10              | 11 | 10              | 10 | 10              | 10 | 10               | 10 | 10               | 10 | 11               | 11 |
| 5               | 12 | 5               | 12 | 6               | 12 | 7               | 12 | 8               | 12 | 9               | 12 | 10              | 12 | 10              | 10 | 10              | 10 | 10               | 10 | 10               | 10 | 11               | 12 |
| 6               | 0  | 6               | 0  | 7               | 0  | 8               | 0  | 9               | 0  | 10              | 0  | 11              | 0  | 12              | 0  | 13              | 0  | 14               | 0  | 15               | 0  | 16               | 0  |
| 6               | 1  | 6               | 1  | 7               | 1  | 8               | 1  | 9               | 1  | 10              | 1  | 11              | 1  | 12              | 1  | 13              | 1  | 14               | 1  | 15               | 1  | 16               | 1  |
| 6               | 2  | 6               | 2  | 7               | 2  | 8               | 2  | 9               | 2  | 10              | 2  | 11              | 2  | 12              | 2  | 13              | 2  | 14               | 2  | 15               | 2  | 16               | 2  |
| 6               | 3  | 6               | 3  | 7               | 3  | 8               | 3  | 9               | 3  | 10              | 3  | 11              | 3  | 12              | 3  | 13              | 3  | 14               | 3  | 15               | 3  | 16               | 3  |
| 6               | 4  | 6               | 4  | 7               | 4  | 8               | 4  | 9               | 4  | 10              | 4  | 11              | 4  | 12              | 4  | 13              | 4  | 14               | 4  | 15               | 4  | 16               | 4  |
| 6               | 5  | 6               | 5  | 7               | 5  | 8               | 5  | 9               | 5  | 10              | 5  | 11              | 5  | 12              | 5  | 13              | 5  | 14               | 5  | 15               | 5  | 16               | 5  |
| 6               | 6  | 6               | 6  | 7               | 6  | 8               | 6  | 9               | 6  | 10              | 6  | 11              | 6  | 12              | 6  | 13              | 6  | 14               | 6  | 15               | 6  | 16               | 6  |
| 6               | 7  | 6               | 7  | 7               | 7  | 8               | 7  | 9               | 7  | 10              | 7  | 11              | 7  | 12              | 7  | 13              | 7  | 14               | 7  | 15               | 7  | 16               | 7  |
| 6               | 8  | 6               | 8  | 7               | 8  | 8               | 8  | 9               | 8  | 10              | 8  | 11              | 8  | 12              | 8  | 13              | 8  | 14               | 8  | 15               | 8  | 16               | 8  |
| 6               | 9  | 6               | 9  | 7               | 9  | 8               | 9  | 9               | 9  | 10              | 9  | 11              | 9  | 12              | 9  | 13              | 9  | 14               | 9  | 15               | 9  | 16               | 9  |
| 6               | 10 | 6               | 10 | 7               | 10 | 8               | 10 | 9               | 10 | 10              | 10 | 10              | 10 | 10              | 10 | 10              | 10 | 10               | 10 | 10               | 10 | 16               | 10 |
| 6               | 11 | 6               | 11 | 7               | 11 | 8               | 11 | 9               | 11 | 10              | 11 | 10              | 11 | 10              | 10 | 10              | 10 | 10               | 10 | 10               | 10 | 11               | 11 |
| 6               | 12 | 6               | 12 | 7               | 12 | 8               | 12 | 9               | 12 | 10              | 12 | 10              | 12 | 10              | 10 | 1               |    |                  |    |                  |    |                  |    |







TABLE I. Mean refraction.

[illegible]







## ARGUMENTS: EXTERNAL THERMOMETER AND MEAN REFRACTION.

| MEAN REFRACTION. |        |        |       |        |        |       |        |        |       |        |        |       |       | THERM.<br>READ. |
|------------------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|-------|-----------------|
| 5' 0"            | 5' 20" | 5' 40" | 6' 0" | 6' 20" | 6' 40" | 7' 0" | 7' 20" | 7' 40" | 8' 0" | 8' 20" | 8' 40" | 9' 0" |       |                 |
| 37.0             | 39.6   | 42.3   | 45.1  | 47.8   | 50.6   | 53.5  | 56.3   | 59.2   | 62.2  | 65.2   | 68.2   | 71.2  | 11.2  | - 16            |
| 35.2             | 37.7   | 40.3   | 42.9  | 45.5   | 48.2   | 50.9  | 53.6   | 56.4   | 59.2  | 62.0   | 64.9   | 67.8  | 1 7.8 | - 15            |
| 33.5             | 35.8   | 38.3   | 40.7  | 43.2   | 45.8   | 48.3  | 50.9   | 53.6   | 56.2  | 58.9   | 61.7   | 64.4  | 1 4.4 | - 14            |
| 31.7             | 34.0   | 36.3   | 38.6  | 41.0   | 43.4   | 45.8  | 48.3   | 50.8   | 53.3  | 55.9   | 58.4   | 61.1  | 1 1.1 | - 13            |
| 30.0             | 32.1   | 34.3   | 36.5  | 38.8   | 41.0   | 43.3  | 45.7   | 48.0   | 50.4  | 52.8   | 55.3   | 57.7  | 12    | - 12            |
| 28.3             | 30.3   | 32.4   | 34.4  | 36.6   | 38.7   | 40.9  | 43.1   | 45.3   | 47.5  | 49.8   | 52.1   | 54.5  | 11    | - 11            |
| 26.6             | 28.5   | 30.4   | 32.4  | 34.4   | 36.4   | 38.4  | 40.5   | 42.6   | 44.7  | 46.8   | 49.0   | 51.2  | 10    | - 10            |
| 24.9             | 26.7   | 28.5   | 30.3  | 32.2   | 34.1   | 36.0  | 37.9   | 39.9   | 41.9  | 43.9   | 45.9   | 48.0  | 9     | - 9             |
| 23.1             | 24.9   | 26.6   | 28.3  | 30.1   | 31.8   | 33.6  | 35.4   | 37.2   | 39.1  | 41.0   | 42.8   | 44.8  | 8     | - 8             |
| 21.6             | 23.2   | 24.7   | 26.3  | 27.9   | 29.6   | 31.2  | 32.9   | 34.6   | 36.3  | 38.1   | 39.8   | 41.6  | 7     | - 7             |
| 20.0             | 21.4   | 22.9   | 24.3  | 25.8   | 27.4   | 28.9  | 30.4   | 32.0   | 33.6  | 35.2   | 36.8   | 38.5  | 6     | - 6             |
| 18.4             | 19.7   | 21.0   | 22.4  | 23.8   | 25.1   | 26.5  | 28.0   | 29.4   | 30.9  | 32.4   | 33.9   | 35.4  | 5     | - 5             |
| 16.8             | 18.0   | 19.2   | 20.4  | 21.7   | 23.0   | 24.2  | 25.5   | 26.9   | 28.2  | 29.5   | 30.9   | 32.3  | 4     | - 4             |
| 15.3             | 16.3   | 17.4   | 18.5  | 19.7   | 20.8   | 22.0  | 23.1   | 24.3   | 25.5  | 26.8   | 28.0   | 29.3  | 3     | - 3             |
| 13.8             | 14.6   | 15.6   | 16.6  | 17.6   | 18.7   | 19.7  | 20.8   | 21.8   | 22.9  | 24.0   | 25.1   | 26.2  | 2     | - 2             |
| 12.2             | 13.0   | 13.8   | 14.7  | 15.6   | 16.5   | 17.5  | 18.4   | 19.4   | 20.3  | 21.3   | 22.3   | 23.3  | 1     | - 1             |
| 10.6             | 11.3   | 12.1   | 12.9  | 13.6   | 14.4   | 15.2  | 16.1   | 16.9   | 17.7  | 18.6   | 19.4   | 20.3  | 0     | - 0             |
| 9.0              | 9.7    | 10.3   | 11.0  | 11.7   | 12.4   | 13.0  | 13.7   | 14.5   | 15.2  | 15.9   | 16.6   | 17.4  | + 1   | - 1             |
| 7.5              | 8.1    | 8.6    | 9.2   | 9.7    | 10.3   | 10.9  | 11.5   | 12.0   | 12.6  | 13.3   | 13.9   | 14.5  | + 2   | - 2             |
| 6.0              | 6.5    | 6.9    | 7.4   | 7.8    | 8.3    | 8.7   | 9.2    | 9.7    | 10.1  | 10.6   | 11.1   | 11.6  | + 3   | - 3             |
| 4.6              | 4.9    | 5.2    | 5.6   | 5.9    | 6.2    | 6.6   | 6.9    | 7.3    | 7.7   | 8.0    | 8.4    | 8.8   | + 4   | - 4             |
| 3.1              | 3.3    | 3.5    | 3.8   | 4.0    | 4.2    | 4.5   | 4.7    | 5.0    | 5.2   | 5.4    | 5.7    | 6.0   | + 5   | - 5             |
| 1.6              | 1.8    | 1.9    | 2.0   | 2.1    | 2.2    | 2.4   | 2.5    | 2.6    | 2.8   | 2.9    | 3.0    | 3.2   | + 6   | - 6             |
| 0.2              | 0.2    | 0.2    | 0.2   | 0.3    | 0.3    | 0.3   | 0.3    | 0.3    | 0.3   | 0.4    | 0.4    | 0.4   | + 7   | - 7             |
| 1.2              | 1.3    | 1.4    | 1.5   | 1.6    | 1.7    | 1.8   | 1.9    | 2.0    | 2.1   | 2.1    | 2.2    | 2.3   | + 8   | - 8             |
| 2.7              | 2.8    | 3.0    | 3.2   | 3.4    | 3.6    | 3.8   | 4.0    | 4.2    | 4.4   | 4.6    | 4.8    | 5.0   | + 9   | - 9             |
| 4.1              | 4.4    | 4.6    | 4.9   | 5.2    | 5.5    | 5.8   | 6.1    | 6.5    | 6.8   | 7.1    | 7.4    | 7.7   | + 10  | - 10            |
| 5.5              | 5.8    | 6.2    | 6.6   | 7.0    | 7.4    | 7.8   | 8.3    | 8.7    | 9.1   | 9.5    | 10.0   | 10.4  | + 11  | - 11            |
| 6.8              | 7.3    | 7.8    | 8.3   | 8.8    | 9.3    | 9.8   | 10.4   | 10.9   | 11.4  | 12.0   | 12.5   | 13.0  | + 12  | - 12            |
| 8.2              | 8.8    | 9.4    | 10.0  | 10.6   | 11.2   | 11.8  | 12.4   | 13.1   | 13.7  | 14.3   | 15.0   | 15.7  | + 13  | - 13            |
| 9.6              | 10.2   | 10.9   | 11.6  | 12.3   | 13.0   | 13.8  | 14.5   | 15.2   | 16.0  | 16.7   | 17.5   | 18.2  | + 14  | - 14            |
| 10.9             | 11.7   | 12.5   | 13.3  | 14.1   | 14.9   | 15.7  | 16.5   | 17.4   | 18.2  | 19.1   | 19.9   | 20.8  | + 15  | - 15            |
| 12.2             | 13.1   | 14.0   | 14.9  | 15.8   | 16.7   | 17.6  | 18.5   | 19.5   | 20.4  | 21.4   | 22.4   | 23.4  | + 16  | - 16            |
| 13.6             | 14.5   | 15.5   | 16.5  | 17.5   | 18.5   | 19.5  | 20.5   | 21.6   | 22.6  | 23.7   | 24.8   | 25.9  | + 17  | - 17            |
| 14.9             | 15.9   | 17.0   | 18.1  | 19.2   | 20.3   | 21.4  | 22.5   | 23.7   | 24.8  | 26.0   | 27.2   | 28.4  | + 18  | - 18            |
| 16.2             | 17.3   | 18.5   | 19.6  | 20.8   | 22.0   | 23.3  | 24.5   | 25.7   | 27.0  | 28.3   | 29.5   | 30.9  | + 19  | - 19            |
| 17.4             | 18.7   | 19.9   | 21.2  | 22.5   | 23.8   | 25.1  | 26.4   | 27.8   | 29.1  | 30.5   | 31.9   | 33.3  | + 20  | - 20            |
| 18.7             | 20.1   | 21.4   | 22.8  | 24.1   | 25.5   | 26.9  | 28.4   | 29.8   | 31.3  | 32.7   | 34.2   | 35.7  | + 21  | - 21            |
| 20.0             | 21.4   | 22.8   | 24.3  | 25.8   | 27.2   | 28.8  | 30.3   | 31.8   | 33.4  | 34.9   | 36.5   | 38.1  | + 22  | - 22            |
| 21.2             | 22.7   | 24.3   | 25.8  | 27.4   | 28.9   | 30.6  | 32.2   | 33.8   | 35.5  | 37.1   | 38.8   | 40.5  | + 23  | - 23            |
| 22.5             | 24.1   | 25.7   | 27.3  | 29.0   | 30.6   | 32.3  | 34.1   | 35.8   | 37.5  | 39.3   | 41.1   | 42.9  | + 24  | - 24            |
| 23.7             | 25.4   | 27.1   | 28.8  | 30.6   | 32.3   | 34.1  | 35.9   | 37.7   | 39.6  | 41.5   | 43.4   | 45.3  | + 25  | - 25            |
| 24.9             | 26.7   | 28.5   | 30.3  | 32.1   | 34.0   | 35.9  | 37.8   | 39.7   | 41.6  | 43.6   | 45.6   | 47.6  | + 26  | - 26            |
| 26.1             | 28.0   | 29.9   | 31.8  | 33.7   | 35.6   | 37.6  | 39.6   | 41.6   | 43.7  | 45.7   | 47.8   | 49.9  | + 27  | - 27            |
| 27.3             | 29.3   | 31.2   | 33.2  | 35.2   | 37.3   | 39.3  | 41.4   | 43.5   | 45.7  | 47.8   | 50.0   | 52.2  | + 28  | - 28            |



TABLE II. CORRECTION FOR TEMPERATURE.

MEAN REFRACTION

| $\lambda$<br>in $\mu$ | $n_D^{20}$ | $n_D^{15}$ | $n_D^{10}$ | $n_D^{5}$ | $n_D^{0}$ | $n_D^{-5}$ | $n_D^{-10}$ | $n_D^{-15}$ | $n_D^{-20}$ | $n_D^{-25}$ | $n_D^{-30}$ | $n_D^{-35}$ | $n_D^{-40}$ |
|-----------------------|------------|------------|------------|-----------|-----------|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 0.4                   | 1.415      | 1.412      | 1.409      | 1.406     | 1.403     | 1.400      | 1.397       | 1.394       | 1.391       | 1.388       | 1.385       | 1.382       | 1.379       |
| 0.5                   | 1.375      | 1.372      | 1.369      | 1.366     | 1.363     | 1.360      | 1.357       | 1.354       | 1.351       | 1.348       | 1.345       | 1.342       | 1.339       |
| 0.6                   | 1.335      | 1.332      | 1.329      | 1.326     | 1.323     | 1.320      | 1.317       | 1.314       | 1.311       | 1.308       | 1.305       | 1.302       | 1.299       |
| 0.7                   | 1.295      | 1.292      | 1.289      | 1.286     | 1.283     | 1.280      | 1.277       | 1.274       | 1.271       | 1.268       | 1.265       | 1.262       | 1.259       |
| 0.8                   | 1.255      | 1.252      | 1.249      | 1.246     | 1.243     | 1.240      | 1.237       | 1.234       | 1.231       | 1.228       | 1.225       | 1.222       | 1.219       |
| 0.9                   | 1.215      | 1.212      | 1.209      | 1.206     | 1.203     | 1.200      | 1.197       | 1.194       | 1.191       | 1.188       | 1.185       | 1.182       | 1.179       |
| 1.0                   | 1.175      | 1.172      | 1.169      | 1.166     | 1.163     | 1.160      | 1.157       | 1.154       | 1.151       | 1.148       | 1.145       | 1.142       | 1.139       |
| 1.2                   | 1.135      | 1.132      | 1.129      | 1.126     | 1.123     | 1.120      | 1.117       | 1.114       | 1.111       | 1.108       | 1.105       | 1.102       | 1.099       |
| 1.4                   | 1.095      | 1.092      | 1.089      | 1.086     | 1.083     | 1.080      | 1.077       | 1.074       | 1.071       | 1.068       | 1.065       | 1.062       | 1.059       |
| 1.6                   | 1.055      | 1.052      | 1.049      | 1.046     | 1.043     | 1.040      | 1.037       | 1.034       | 1.031       | 1.028       | 1.025       | 1.022       | 1.019       |
| 1.8                   | 1.015      | 1.012      | 1.009      | 1.006     | 1.003     | 1.000      | 0.997       | 0.994       | 0.991       | 0.988       | 0.985       | 0.982       | 0.979       |
| 2.0                   | 0.975      | 0.972      | 0.969      | 0.966     | 0.963     | 0.960      | 0.957       | 0.954       | 0.951       | 0.948       | 0.945       | 0.942       | 0.939       |
| 2.2                   | 0.935      | 0.932      | 0.929      | 0.926     | 0.923     | 0.920      | 0.917       | 0.914       | 0.911       | 0.908       | 0.905       | 0.902       | 0.899       |
| 2.4                   | 0.895      | 0.892      | 0.889      | 0.886     | 0.883     | 0.880      | 0.877       | 0.874       | 0.871       | 0.868       | 0.865       | 0.862       | 0.859       |
| 2.6                   | 0.855      | 0.852      | 0.849      | 0.846     | 0.843     | 0.840      | 0.837       | 0.834       | 0.831       | 0.828       | 0.825       | 0.822       | 0.819       |
| 2.8                   | 0.815      | 0.812      | 0.809      | 0.806     | 0.803     | 0.800      | 0.797       | 0.794       | 0.791       | 0.788       | 0.785       | 0.782       | 0.779       |
| 3.0                   | 0.775      | 0.772      | 0.769      | 0.766     | 0.763     | 0.760      | 0.757       | 0.754       | 0.751       | 0.748       | 0.745       | 0.742       | 0.739       |
| 3.2                   | 0.735      | 0.732      | 0.729      | 0.726     | 0.723     | 0.720      | 0.717       | 0.714       | 0.711       | 0.708       | 0.705       | 0.702       | 0.699       |
| 3.4                   | 0.695      | 0.692      | 0.689      | 0.686     | 0.683     | 0.680      | 0.677       | 0.674       | 0.671       | 0.668       | 0.665       | 0.662       | 0.659       |
| 3.6                   | 0.655      | 0.652      | 0.649      | 0.646     | 0.643     | 0.640      | 0.637       | 0.634       | 0.631       | 0.628       | 0.625       | 0.622       | 0.619       |
| 3.8                   | 0.615      | 0.612      | 0.609      | 0.606     | 0.603     | 0.600      | 0.597       | 0.594       | 0.591       | 0.588       | 0.585       | 0.582       | 0.579       |
| 4.0                   | 0.575      | 0.572      | 0.569      | 0.566     | 0.563     | 0.560      | 0.557       | 0.554       | 0.551       | 0.548       | 0.545       | 0.542       | 0.539       |
| 4.2                   | 0.535      | 0.532      | 0.529      | 0.526     | 0.523     | 0.520      | 0.517       | 0.514       | 0.511       | 0.508       | 0.505       | 0.502       | 0.499       |
| 4.4                   | 0.495      | 0.492      | 0.489      | 0.486     | 0.483     | 0.480      | 0.477       | 0.474       | 0.471       | 0.468       | 0.465       | 0.462       | 0.459       |
| 4.6                   | 0.455      | 0.452      | 0.449      | 0.446     | 0.443     | 0.440      | 0.437       | 0.434       | 0.431       | 0.428       | 0.425       | 0.422       | 0.419       |
| 4.8                   | 0.415      | 0.412      | 0.409      | 0.406     | 0.403     | 0.400      | 0.397       | 0.394       | 0.391       | 0.388       | 0.385       | 0.382       | 0.379       |
| 5.0                   | 0.375      | 0.372      | 0.369      | 0.366     | 0.363     | 0.360      | 0.357       | 0.354       | 0.351       | 0.348       | 0.345       | 0.342       | 0.339       |
| 5.2                   | 0.335      | 0.332      | 0.329      | 0.326     | 0.323     | 0.320      | 0.317       | 0.314       | 0.311       | 0.308       | 0.305       | 0.302       | 0.299       |
| 5.4                   | 0.295      | 0.292      | 0.289      | 0.286     | 0.283     | 0.280      | 0.277       | 0.274       | 0.271       | 0.268       | 0.265       | 0.262       | 0.259       |
| 5.6                   | 0.255      | 0.252      | 0.249      | 0.246     | 0.243     | 0.240      | 0.237       | 0.234       | 0.231       | 0.228       | 0.225       | 0.222       | 0.219       |
| 5.8                   | 0.215      | 0.212      | 0.209      | 0.206     | 0.203     | 0.200      | 0.197       | 0.194       | 0.191       | 0.188       | 0.185       | 0.182       | 0.179       |
| 6.0                   | 0.175      | 0.172      | 0.169      | 0.166     | 0.163     | 0.160      | 0.157       | 0.154       | 0.151       | 0.148       | 0.145       | 0.142       | 0.139       |
| 6.2                   | 0.135      | 0.132      | 0.129      | 0.126     | 0.123     | 0.120      | 0.117       | 0.114       | 0.111       | 0.108       | 0.105       | 0.102       | 0.099       |
| 6.4                   | 0.095      | 0.092      | 0.089      | 0.086     | 0.083     | 0.080      | 0.077       | 0.074       | 0.071       | 0.068       | 0.065       | 0.062       | 0.059       |
| 6.6                   | 0.055      | 0.052      | 0.049      | 0.046     | 0.043     | 0.040      | 0.037       | 0.034       | 0.031       | 0.028       | 0.025       | 0.022       | 0.019       |
| 6.8                   | 0.015      | 0.012      | 0.009      | 0.006     | 0.003     | 0.000      | -0.003      | -0.006      | -0.009      | -0.012      | -0.015      | -0.018      | -0.021      |
| 7.0                   | -0.025     | -0.028     | -0.031     | -0.034    | -0.037    | -0.040     | -0.043      | -0.046      | -0.049      | -0.052      | -0.055      | -0.058      | -0.061      |
| 7.2                   | -0.065     | -0.068     | -0.071     | -0.074    | -0.077    | -0.080     | -0.083      | -0.086      | -0.089      | -0.092      | -0.095      | -0.098      | -0.101      |
| 7.4                   | -0.105     | -0.108     | -0.111     | -0.114    | -0.117    | -0.120     | -0.123      | -0.126      | -0.129      | -0.132      | -0.135      | -0.138      | -0.141      |
| 7.6                   | -0.145     | -0.148     | -0.151     | -0.154    | -0.157    | -0.160     | -0.163      | -0.166      | -0.169      | -0.172      | -0.175      | -0.178      | -0.181      |
| 7.8                   | -0.185     | -0.188     | -0.191     | -0.194    | -0.197    | -0.200     | -0.203      | -0.206      | -0.209      | -0.212      | -0.215      | -0.218      | -0.221      |
| 8.0                   | -0.225     | -0.228     | -0.231     | -0.234    | -0.237    | -0.240     | -0.243      | -0.246      | -0.249      | -0.252      | -0.255      | -0.258      | -0.261      |
| 8.2                   | -0.265     | -0.268     | -0.271     | -0.274    | -0.277    | -0.280     | -0.283      | -0.286      | -0.289      | -0.292      | -0.295      | -0.298      | -0.301      |
| 8.4                   | -0.305     | -0.308     | -0.311     | -0.314    | -0.317    | -0.320     | -0.323      | -0.326      | -0.329      | -0.332      | -0.335      | -0.338      | -0.341      |
| 8.6                   | -0.345     | -0.348     | -0.351     | -0.354    | -0.357    | -0.360     | -0.363      | -0.366      | -0.369      | -0.372      | -0.375      | -0.378      | -0.381      |
| 8.8                   | -0.385     | -0.388     | -0.391     | -0.394    | -0.397    | -0.400     | -0.403      | -0.406      | -0.409      | -0.412      | -0.415      | -0.418      | -0.421      |
| 9.0                   | -0.425     | -0.428     | -0.431     | -0.434    | -0.437    | -0.440     | -0.443      | -0.446      | -0.449      | -0.452      | -0.455      | -0.458      | -0.461      |
| 9.2                   | -0.465     | -0.468     | -0.471     | -0.474    | -0.477    | -0.480     | -0.483      | -0.486      | -0.489      | -0.492      | -0.495      | -0.498      | -0.501      |
| 9.4                   | -0.505     | -0.508     | -0.511     | -0.514    | -0.517    | -0.520     | -0.523      | -0.526      | -0.529      | -0.532      | -0.535      | -0.538      | -0.541      |
| 9.6                   | -0.545     | -0.548     | -0.551     | -0.554    | -0.557    | -0.560     | -0.563      | -0.566      | -0.569      | -0.572      | -0.575      | -0.578      | -0.581      |
| 9.8                   | -0.585     | -0.588     | -0.591     | -0.594    | -0.597    | -0.600     | -0.603      | -0.606      | -0.609      | -0.612      | -0.615      | -0.618      | -0.621      |
| 10.0                  | -0.625     | -0.628     | -0.631     | -0.634    | -0.637    | -0.640     | -0.643      | -0.646      | -0.649      | -0.652      | -0.655      | -0.658      | -0.661      |



## ARGUMENTS: EXTERNAL THERMOMETER AND MEAN REFRACTION.

| MEAN REFRACTION. |         |         |         |         |         |         |         |         |         |         |      | THERM.<br>MEASUR. |
|------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|------|-------------------|
| 12' 40"          | 13' 0"  | 13' 20" | 13' 40" | 14' 0"  | 14' 20" | 14' 40" | 15' 0"  | 15' 20" | 15' 40" | 16' 0"  |      |                   |
| +                | +       | +       | +       | +       | +       | +       | +       | +       | +       | +       |      |                   |
| 1' 47.7          | 1' 51.3 | 1' 54.9 | 1' 58.5 | 2' 2.2  | 2' 6.0  | 2' 9.7  | 2' 13.5 | 2' 17.4 | 2' 21.3 | 2' 25.3 | - 16 |                   |
| 1' 42.5          | 1' 45.9 | 1' 49.3 | 1' 52.8 | 1' 56.3 | 1' 59.9 | 2' 3.4  | 2' 7.1  | 2' 10.7 | 2' 14.5 | 2' 18.2 | - 15 |                   |
| 1' 37.3          | 1' 40.6 | 1' 43.8 | 1' 47.1 | 1' 50.5 | 1' 53.8 | 1' 57.2 | 2' 0.7  | 2' 4.2  | 2' 7.7  | 2' 11.2 | - 14 |                   |
| 1' 32.2          | 1' 35.3 | 1' 38.4 | 1' 41.5 | 1' 44.7 | 1' 47.9 | 1' 51.1 | 1' 54.3 | 1' 57.6 | 2' 1.0  | 2' 4.3  | - 13 |                   |
| 1' 27.2          | 1' 30.1 | 1' 33.0 | 1' 36.0 | 1' 39.0 | 1' 42.0 | 1' 45.0 | 1' 48.1 | 1' 51.2 | 1' 54.3 | 1' 57.5 | - 12 |                   |
| 1' 22.2          | 1' 24.9 | 1' 27.7 | 1' 30.5 | 1' 33.3 | 1' 36.1 | 1' 39.0 | 1' 41.9 | 1' 44.8 | 1' 47.8 | 1' 50.8 | - 11 |                   |
| 1' 17.3          | 1' 19.8 | 1' 22.4 | 1' 25.0 | 1' 27.7 | 1' 30.4 | 1' 33.1 | 1' 35.8 | 1' 38.5 | 1' 41.3 | 1' 44.1 | - 10 |                   |
| 1' 12.4          | 1' 14.8 | 1' 17.2 | 1' 19.7 | 1' 22.2 | 1' 24.7 | 1' 27.2 | 1' 29.7 | 1' 32.3 | 1' 34.9 | 1' 37.5 | - 9  |                   |
| 1' 7.6           | 1' 9.8  | 1' 12.1 | 1' 14.4 | 1' 16.7 | 1' 19.0 | 1' 21.3 | 1' 23.7 | 1' 26.1 | 1' 28.6 | 1' 31.0 | - 8  |                   |
| 1' 2.8           | 1' 4.9  | 1' 7.0  | 1' 9.1  | 1' 11.2 | 1' 13.4 | 1' 15.6 | 1' 17.8 | 1' 20.0 | 1' 22.3 | 1' 24.6 | - 7  |                   |
| 58.1             | 1' 0.0  | 1' 1.9  | 1' 3.9  | 1' 5.9  | 1' 7.9  | 1' 9.9  | 1' 11.9 | 1' 14.0 | 1' 16.1 | 1' 18.2 | - 6  |                   |
| 53.1             | 55.1    | 56.9    | 58.7    | 1' 0.5  | 1' 2.4  | 1' 4.2  | 1' 6.1  | 1' 8.0  | 1' 10.0 | 1' 11.9 | - 5  |                   |
| 48.7             | 50.4    | 52.0    | 53.6    | 55.3    | 57.0    | 58.7    | 1' 0.4  | 1' 2.1  | 1' 3.9  | 1' 5.6  | - 4  |                   |
| 44.2             | 45.6    | 47.1    | 48.6    | 50.1    | 51.6    | 53.1    | 54.7    | 56.3    | 57.9    | 59.5    | - 3  |                   |
| 39.6             | 40.9    | 42.2    | 43.6    | 44.9    | 46.3    | 47.7    | 49.1    | 50.5    | 51.9    | 53.3    | - 2  |                   |
| 35.1             | 36.3    | 37.4    | 38.6    | 39.8    | 41.0    | 42.2    | 43.5    | 44.7    | 46.0    | 47.3    | - 1  |                   |
| 30.7             | 31.7    | 32.7    | 33.7    | 34.8    | 35.8    | 36.9    | 38.0    | 39.1    | 40.2    | 41.3    | 0    |                   |
| 26.2             | 27.1    | 28.0    | 28.9    | 29.8    | 30.7    | 31.6    | 32.5    | 33.4    | 34.4    | 35.3    | + 1  |                   |
| 21.9             | 22.6    | 23.3    | 24.1    | 24.8    | 25.6    | 26.3    | 27.1    | 27.9    | 28.7    | 29.5    | + 2  |                   |
| 17.5             | 18.1    | 18.7    | 19.3    | 19.9    | 20.5    | 21.1    | 21.7    | 22.4    | 23.0    | 23.7    | + 3  |                   |
| 13.1             | 13.7    | 14.1    | 14.6    | 15.0    | 15.5    | 16.0    | 16.4    | 16.9    | 17.4    | 17.9    | + 4  |                   |
| 9.0              | 9.3     | 9.6     | 9.9     | 10.2    | 10.6    | 10.9    | 11.2    | 11.5    | 11.9    | 12.2    | + 5  |                   |
| 4.8              | 5.0     | 5.2     | 5.3     | 5.5     | 5.7     | 5.8     | 6.0     | 6.2     | 6.4     | 6.6     | + 6  |                   |
| 0.7              | 0.7     | 0.7     | 0.8     | 0.8     | 0.8     | 0.8     | 0.9     | 0.9     | 0.9     | 1.0     | + 7  |                   |
| 3.4              | 3.6     | 3.7     | 3.8     | 3.9     | 4.0     | 4.1     | 4.2     | 4.3     | 4.4     | 4.5     | + 8  |                   |
| 7.5              | 7.8     | 8.0     | 8.3     | 8.5     | 8.7     | 9.0     | 9.2     | 9.5     | 9.8     | 10.0    | + 9  |                   |
| 11.6             | 11.9    | 12.3    | 12.7    | 13.1    | 13.5    | 13.8    | 14.2    | 14.6    | 15.0    | 15.4    | + 10 |                   |
| 15.6             | 16.1    | 16.6    | 17.1    | 17.6    | 18.1    | 18.6    | 19.2    | 19.7    | 20.2    | 20.8    | + 11 |                   |
| 19.5             | 20.2    | 20.8    | 21.4    | 22.1    | 22.7    | 23.4    | 24.1    | 24.7    | 25.4    | 26.1    | + 12 |                   |
| 23.4             | 24.2    | 25.0    | 25.7    | 26.5    | 27.3    | 28.1    | 28.9    | 29.7    | 30.5    | 31.4    | + 13 |                   |
| 27.3             | 28.2    | 29.1    | 30.0    | 30.9    | 31.8    | 32.8    | 33.7    | 34.7    | 35.6    | 36.6    | + 14 |                   |
| 31.2             | 32.2    | 33.2    | 34.2    | 35.3    | 36.3    | 37.4    | 38.5    | 39.5    | 40.6    | 41.7    | + 15 |                   |
| 35.0             | 36.1    | 37.3    | 38.4    | 39.6    | 40.8    | 42.0    | 43.2    | 44.4    | 45.6    | 46.8    | + 16 |                   |
| 38.8             | 40.0    | 41.3    | 42.6    | 43.9    | 45.2    | 46.5    | 47.8    | 49.2    | 50.5    | 51.9    | + 17 |                   |
| 42.5             | 43.9    | 45.3    | 46.7    | 48.1    | 49.5    | 51.0    | 52.4    | 53.9    | 55.4    | 56.9    | + 18 |                   |
| 46.2             | 47.7    | 49.2    | 50.8    | 52.3    | 53.8    | 55.4    | 57.0    | 58.6    | 1' 0.2  | 1' 1.9  | + 19 |                   |
| 49.9             | 51.5    | 53.1    | 54.8    | 56.5    | 58.1    | 59.8    | 1' 1.5  | 1' 3.3  | 1' 5.0  | 1' 6.8  | + 20 |                   |
| 53.5             | 55.3    | 57.0    | 58.8    | 1' 0.6  | 1' 2.4  | 1' 4.2  | 1' 6.0  | 1' 7.9  | 1' 9.7  | 1' 11.6 | + 21 |                   |
| 57.1             | 59.0    | 1' 0.9  | 1' 2.8  | 1' 4.7  | 1' 6.6  | 1' 8.5  | 1' 10.5 | 1' 12.4 | 1' 14.4 | 1' 16.4 | + 22 |                   |
| 1' 0.7           | 1' 2.7  | 1' 4.7  | 1' 6.7  | 1' 8.7  | 1' 10.7 | 1' 12.8 | 1' 14.9 | 1' 17.0 | 1' 19.1 | 1' 21.2 | + 23 |                   |
| 1' 4.3           | 1' 6.3  | 1' 8.4  | 1' 10.6 | 1' 12.7 | 1' 14.9 | 1' 17.0 | 1' 19.2 | 1' 21.4 | 1' 23.7 | 1' 25.9 | + 24 |                   |
| 1' 7.8           | 1' 10.0 | 1' 12.2 | 1' 14.4 | 1' 16.7 | 1' 18.9 | 1' 21.2 | 1' 23.6 | 1' 25.9 | 1' 28.2 | 1' 30.6 | + 25 |                   |
| 1' 11.3          | 1' 13.6 | 1' 15.9 | 1' 18.2 | 1' 20.6 | 1' 23.0 | 1' 25.4 | 1' 27.8 | 1' 30.3 | 1' 32.8 | 1' 35.3 | + 26 |                   |
| 1' 14.7          | 1' 17.1 | 1' 19.6 | 1' 22.0 | 1' 24.5 | 1' 27.0 | 1' 29.5 | 1' 32.1 | 1' 34.7 | 1' 37.3 | 1' 39.9 | + 27 |                   |
| 1' 18.1          | 1' 20.7 | 1' 23.2 | 1' 25.8 | 1' 28.4 | 1' 31.0 | 1' 33.6 | 1' 36.3 | 1' 39.0 | 1' 41.7 | 1' 44.5 | + 28 |                   |



TABLE III. CORRECTION FOR HEIGHT OF BAROMETER.

| MEAN REFRACTION + CORR. TAB. II. |        |        |       |        |        |       |        |        |       |        |        |       |        |
|----------------------------------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|
| BARO-<br>METER                   | 0' 20" | 0' 40" | 1' 0" | 1' 20" | 1' 40" | 2' 0" | 2' 20" | 2' 40" | 3' 0" | 3' 20" | 3' 40" | 4' 0" | 4' 20" |
| 26 3                             | 1.1    | 2.2    | 3.3   | 4.4    | 5.5    | 6.6   | 7.7    | 8.8    | 9.9   | 11.0   | 12.1   | 13.2  | 14.3   |
| 4                                | 1.0    | 2.1    | 3.1   | 4.2    | 5.2    | 6.2   | 7.3    | 8.3    | 9.3   | 10.4   | 11.4   | 12.5  | 13.5   |
| 5                                | 1.0    | 1.9    | 2.9   | 3.9    | 4.9    | 5.9   | 6.8    | 7.8    | 8.8   | 9.8    | 10.8   | 11.7  | 12.7   |
| 6                                | 0.9    | 1.8    | 2.7   | 3.7    | 4.6    | 5.5   | 6.4    | 7.3    | 8.3   | 9.2    | 10.1   | 11.0  | 11.9   |
| 7                                | 0.9    | 1.7    | 2.6   | 3.4    | 4.3    | 5.1   | 6.0    | 6.9    | 7.7   | 8.6    | 9.4    | 10.3  | 11.1   |
| 8                                | 0.8    | 1.6    | 2.4   | 3.2    | 4.0    | 4.8   | 5.6    | 6.4    | 7.2   | 8.0    | 8.8    | 9.6   | 10.4   |
| 9                                | 0.7    | 1.5    | 2.2   | 2.9    | 3.7    | 4.4   | 5.2    | 5.9    | 6.6   | 7.4    | 8.1    | 8.8   | 9.6    |
| 10                               | 0.7    | 1.4    | 2.0   | 2.7    | 3.4    | 4.1   | 4.7    | 5.4    | 6.1   | 6.8    | 7.5    | 8.1   | 8.8    |
| 11                               | 0.6    | 1.2    | 1.8   | 2.5    | 3.1    | 3.7   | 4.3    | 4.9    | 5.5   | 6.2    | 6.8    | 7.4   | 8.0    |
| 27 0                             | 0.6    | 1.1    | 1.7   | 2.2    | 2.8    | 3.3   | 3.9    | 4.4    | 5.0   | 5.6    | 6.1    | 6.7   | 7.2    |
| 1                                | 0.5    | 1.0    | 1.5   | 2.0    | 2.5    | 3.0   | 3.5    | 4.0    | 4.5   | 5.0    | 5.5    | 6.0   | 6.5    |
| 2                                | 0.4    | 0.9    | 1.3   | 1.7    | 2.2    | 2.6   | 3.0    | 3.5    | 3.9   | 4.4    | 4.8    | 5.2   | 5.7    |
| 3                                | 0.4    | 0.7    | 1.1   | 1.5    | 1.9    | 2.3   | 2.6    | 3.0    | 3.4   | 3.8    | 4.1    | 4.5   | 4.9    |
| 4                                | 0.3    | 0.6    | 0.9   | 1.3    | 1.6    | 1.9   | 2.2    | 2.5    | 2.8   | 3.2    | 3.5    | 3.8   | 4.1    |
| 5                                | 0.3    | 0.5    | 0.8   | 1.0    | 1.3    | 1.5   | 1.8    | 2.0    | 2.3   | 2.6    | 2.8    | 3.1   | 3.3    |
| 6                                | 0.2    | 0.4    | 0.6   | 0.8    | 1.0    | 1.2   | 1.4    | 1.6    | 1.8   | 2.0    | 2.2    | 2.4   | 2.5    |
| 7                                | 0.1    | 0.3    | 0.4   | 0.5    | 0.7    | 0.8   | 0.9    | 1.1    | 1.2   | 1.4    | 1.5    | 1.6   | 1.8    |
| 8                                | 0.1    | 0.1    | 0.2   | 0.3    | 0.4    | 0.5   | 0.5    | 0.6    | 0.7   | 0.8    | 0.8    | 0.9   | 1.0    |
| 9                                | 0.0    | 0.0    | 0.0   | 0.1    | 0.1    | 0.1   | 0.1    | 0.1    | 0.1   | 0.2    | 0.2    | 0.2   | 0.2    |
| 10                               | +      | +      | +     | +      | +      | +     | +      | +      | +     | +      | +      | +     | +      |
| 11                               | 0.0    | 0.1    | 0.1   | 0.2    | 0.2    | 0.3   | 0.3    | 0.4    | 0.4   | 0.5    | 0.5    | 0.5   | 0.6    |
| 28 0                             | 0.1    | 0.2    | 0.3   | 0.4    | 0.5    | 0.6   | 0.7    | 0.8    | 1.0   | 1.1    | 1.2    | 1.3   | 1.4    |
| 1                                | 0.2    | 0.5    | 0.7   | 0.9    | 1.1    | 1.4   | 1.6    | 1.8    | 2.0   | 2.3    | 2.5    | 2.7   | 2.9    |
| 2                                | 0.3    | 0.6    | 0.9   | 1.2    | 1.4    | 1.7   | 2.0    | 2.3    | 2.6   | 2.9    | 3.1    | 3.4   | 3.7    |
| 3                                | 0.4    | 0.7    | 1.0   | 1.4    | 1.7    | 2.1   | 2.4    | 2.8    | 3.1   | 3.5    | 3.8    | 4.2   | 4.5    |
| 4                                | 0.4    | 0.8    | 1.2   | 1.6    | 2.0    | 2.4   | 2.8    | 3.3    | 3.7   | 4.1    | 4.5    | 4.9   | 5.3    |
| 5                                | 0.5    | 0.9    | 1.4   | 1.9    | 2.3    | 2.8   | 3.3    | 3.7    | 4.2   | 4.7    | 5.1    | 5.6   | 6.1    |
| 6                                | 0.5    | 1.1    | 1.6   | 2.1    | 2.6    | 3.2   | 3.7    | 4.2    | 4.7   | 5.3    | 5.8    | 6.3   | 6.9    |
| 7                                | 0.6    | 1.2    | 1.8   | 2.4    | 2.9    | 3.5   | 4.1    | 4.7    | 5.3   | 5.9    | 6.5    | 7.0   | 7.6    |
| 8                                | 0.7    | 1.3    | 1.9   | 2.6    | 3.2    | 3.9   | 4.5    | 5.2    | 5.8   | 6.5    | 7.1    | 7.8   | 8.4    |
| 9                                | 0.7    | 1.4    | 2.1   | 2.8    | 3.5    | 4.2   | 5.0    | 5.7    | 6.4   | 7.1    | 7.8    | 8.5   | 9.2    |
| 10                               | 0.8    | 1.5    | 2.3   | 3.1    | 3.8    | 4.6   | 5.4    | 6.1    | 6.9   | 7.7    | 8.4    | 9.2   | 10.0   |
| 11                               | 0.8    | 1.7    | 2.5   | 3.3    | 4.1    | 5.0   | 5.8    | 6.6    | 7.4   | 8.3    | 9.1    | 9.9   | 10.8   |
| 29 0                             | 0.9    | 1.8    | 2.7   | 3.5    | 4.4    | 5.3   | 6.2    | 7.1    | 8.0   | 8.9    | 9.8    | 10.7  | 11.6   |
| 1                                | 1.0    | 1.9    | 2.8   | 3.8    | 4.7    | 5.7   | 6.6    | 7.6    | 8.5   | 9.5    | 10.4   | 11.4  | 12.3   |
| 2                                | 1.0    | 2.0    | 3.0   | 4.0    | 5.0    | 6.0   | 7.1    | 8.1    | 9.1   | 10.1   | 11.1   | 12.1  | 13.1   |

1) Before using the table, a correction is required for the height of the barometer. This correction depends upon the attached thermometer, and is taken with the argument  $t-t'$  from the small table at p. 564.



ARGUMENTS: CORRECTED BAROMETER<sup>1)</sup> AND MEAN REFRACTION CORRECTED  
FOR TEMPERATURE BY TAB. II.

MEAN REFRACTION + CORR. TAB. II.

| 4' 40" | 5' 0" | 5' 20" | 5' 40" | 6' 0" | 6' 20" | 6' 40" | 7' 0" | 7' 20" | 7' 40" | 8' 0" | 8' 20" | 8' 40" | 9' 0" |
|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|
| 15.4   | 16.5  | 17.5   | 18.7   | 19.8  | 20.9   | 22.0   | 23.1  | 24.3   | 25.4   | 26.5  | 27.6   | 28.7   | 29.9  |
| 14.5   | 15.6  | 16.6   | 17.7   | 18.7  | 19.8   | 20.8   | 21.9  | 22.9   | 24.0   | 25.0  | 26.1   | 27.2   | 28.2  |
| 13.7   | 14.7  | 15.7   | 16.6   | 17.6  | 18.6   | 19.6   | 20.6  | 21.6   | 22.6   | 23.6  | 24.6   | 25.6   | 26.6  |
| 12.9   | 13.8  | 14.7   | 15.6   | 16.6  | 17.5   | 18.4   | 19.3  | 20.3   | 21.2   | 22.1  | 23.1   | 24.0   | 25.0  |
| 12.0   | 12.9  | 13.7   | 14.6   | 15.5  | 16.3   | 17.2   | 18.1  | 18.9   | 19.8   | 20.7  | 21.6   | 22.4   | 23.3  |
| 11.2   | 12.0  | 12.8   | 13.6   | 14.4  | 15.2   | 16.0   | 16.8  | 17.6   | 18.4   | 19.2  | 20.0   | 20.9   | 21.7  |
| 10.3   | 11.1  | 11.8   | 12.5   | 13.3  | 14.0   | 14.8   | 15.5  | 16.3   | 17.0   | 17.8  | 18.5   | 19.3   | 20.0  |
| 9.5    | 10.2  | 10.8   | 11.5   | 12.2  | 12.9   | 13.6   | 14.3  | 15.0   | 15.6   | 16.3  | 17.0   | 17.7   | 18.4  |
| 8.6    | 9.3   | 9.9    | 10.5   | 11.1  | 11.7   | 12.4   | 13.0  | 13.6   | 14.3   | 14.9  | 15.5   | 16.1   | 16.8  |
| 7.8    | 8.4   | 8.9    | 9.5    | 10.0  | 10.6   | 11.2   | 11.7  | 12.3   | 12.9   | 13.4  | 14.0   | 14.6   | 15.1  |
| 7.0    | 7.5   | 8.0    | 8.5    | 9.0   | 9.5    | 10.0   | 10.5  | 11.0   | 11.5   | 12.0  | 12.5   | 13.0   | 13.5  |
| 6.1    | 6.5   | 7.0    | 7.4    | 7.9   | 8.3    | 8.7    | 9.2   | 9.6    | 10.1   | 10.5  | 11.0   | 11.4   | 11.9  |
| 5.3    | 5.6   | 6.0    | 6.4    | 6.8   | 7.2    | 7.5    | 7.9   | 8.3    | 8.7    | 9.1   | 9.4    | 9.8    | 10.2  |
| 4.4    | 4.7   | 5.1    | 5.4    | 5.7   | 6.0    | 6.3    | 6.7   | 7.0    | 7.3    | 7.6   | 7.9    | 8.3    | 8.6   |
| 3.6    | 3.8   | 4.1    | 4.4    | 4.6   | 4.9    | 5.1    | 5.4   | 5.6    | 5.9    | 6.2   | 6.4    | 6.7    | 6.9   |
| 2.7    | 2.9   | 3.1    | 3.3    | 3.5   | 3.7    | 3.9    | 4.1   | 4.3    | 4.5    | 4.7   | 4.9    | 5.1    | 5.3   |
| 1.9    | 2.0   | 2.2    | 2.3    | 2.4   | 2.6    | 2.7    | 2.8   | 3.0    | 3.1    | 3.3   | 3.4    | 3.5    | 3.7   |
| 1.0    | 1.1   | 1.2    | 1.3    | 1.4   | 1.4    | 1.5    | 1.6   | 1.6    | 1.7    | 1.8   | 1.9    | 2.0    | 2.0   |
| 0.2    | 0.2   | 0.2    | 0.3    | 0.3   | 0.3    | 0.3    | 0.3   | 0.3    | 0.3    | 0.4   | 0.4    | 0.4    | 0.4   |
| +      | +     | +      | +      | +     | +      | +      | +     | +      | +      | +     | +      | +      | +     |
| 0.6    | 0.7   | 0.7    | 0.8    | 0.8   | 0.9    | 0.9    | 1.0   | 1.0    | 1.1    | 1.1   | 1.1    | 1.2    | 1.2   |
| 1.5    | 1.6   | 1.7    | 1.8    | 1.9   | 2.0    | 2.1    | 2.2   | 2.3    | 2.5    | 2.6   | 2.7    | 2.8    | 2.9   |
| 2.3    | 2.5   | 2.7    | 2.8    | 3.0   | 3.2    | 3.3    | 3.5   | 3.7    | 3.8    | 4.0   | 4.2    | 4.4    | 4.5   |
| 3.2    | 3.4   | 3.6    | 3.8    | 4.1   | 4.3    | 4.5    | 4.8   | 5.0    | 5.2    | 5.5   | 5.7    | 5.9    | 6.2   |
| 4.0    | 4.3   | 4.6    | 4.9    | 5.2   | 5.5    | 5.7    | 6.0   | 6.3    | 6.6    | 6.9   | 7.2    | 7.5    | 7.8   |
| 4.9    | 5.2   | 5.6    | 5.9    | 6.3   | 6.6    | 7.0    | 7.3   | 7.7    | 8.0    | 8.4   | 8.7    | 9.1    | 9.4   |
| 5.7    | 6.1   | 6.5    | 6.9    | 7.3   | 7.8    | 8.2    | 8.6   | 9.0    | 9.4    | 9.8   | 10.2   | 10.7   | 11.1  |
| 6.5    | 7.0   | 7.5    | 7.9    | 8.4   | 8.9    | 9.4    | 9.8   | 10.3   | 10.8   | 11.3  | 11.7   | 12.2   | 12.7  |
| 7.4    | 7.9   | 8.4    | 9.0    | 9.5   | 10.0   | 10.6   | 11.1  | 11.6   | 12.2   | 12.7  | 13.3   | 13.8   | 14.3  |
| 8.2    | 8.8   | 9.4    | 10.0   | 10.6  | 11.2   | 11.8   | 12.4  | 12.9   | 13.6   | 14.2  | 14.8   | 15.4   | 16.0  |
| 9.1    | 9.7   | 10.4   | 11.0   | 11.7  | 12.3   | 13.0   | 13.7  | 14.3   | 15.0   | 15.6  | 16.3   | 17.0   | 17.6  |
| 9.9    | 10.6  | 11.3   | 12.0   | 12.8  | 13.5   | 14.2   | 14.9  | 15.6   | 16.4   | 17.1  | 17.8   | 18.5   | 19.3  |
| 10.8   | 11.5  | 12.3   | 13.1   | 13.9  | 14.6   | 15.4   | 16.2  | 17.0   | 17.8   | 18.5  | 19.3   | 20.1   | 20.9  |
| 11.6   | 12.4  | 13.3   | 14.1   | 14.9  | 15.8   | 16.6   | 17.5  | 18.3   | 19.1   | 20.0  | 20.8   | 21.7   | 22.5  |
| 12.4   | 13.3  | 14.2   | 15.1   | 16.0  | 16.9   | 17.8   | 18.7  | 19.6   | 20.5   | 21.5  | 22.4   | 23.3   | 24.2  |
| 13.3   | 14.2  | 15.2   | 16.2   | 17.1  | 18.1   | 19.0   | 20.0  | 21.0   | 21.9   | 22.9  | 23.9   | 24.9   | 25.8  |
| 14.1   | 15.1  | 16.2   | 17.2   | 18.2  | 19.2   | 20.2   | 21.3  | 22.3   | 23.3   | 24.4  | 25.4   | 26.4   | 27.5  |

Example:

App. Alt.  $4^{\circ} 18' 31''$   
Barometer 28" 5' 3" P. M.  
Therm. external  $t = 12.5^{\circ}$  R.  
" attached  $t = 4.8$   
 $t - t' = 7.7$  Corr. =  $0.52$   
Barom. . . . . 28" 5' 30"  
Corr. Barom. . . . . 28" 4' 78"

Tab. I. App. Alt  $4^{\circ} 18' 31''$  . . . 11' 1" 5  
" II. M. refr. 11' 1" 5 }  
Therm.  $- 12.5^{\circ}$  . . . + 1 15.6  
" III. M. refr. + Tab. II. 12' 17" 1 } + 0 17.0  
Corr. Barom. 28" 4' 78" }  
Refraction . . . . . 12' 34" 1



TABLE III. CORRECTION FOR HEIGHT OF BAROMETER.

| MEAN REFRACTION + CORR. TAB. II. |       |        |        |        |         |         |        |         |         |        |         |         |        |
|----------------------------------|-------|--------|--------|--------|---------|---------|--------|---------|---------|--------|---------|---------|--------|
| BARO-<br>METER                   | 9' 0" | 9' 20" | 9' 40" | 10' 0" | 10' 20" | 10' 40" | 11' 0" | 11' 20" | 11' 40" | 12' 0" | 12' 20" | 12' 40" | 13' 0" |
| 26" 3"                           | 29.9  | 31.0   | 32.2   | 33.3   | 34.4    | 35.5    | 36.7   | 37.8    | 39.0    | 40.1   | 41.3    | 42.4    | 43.6   |
| 4                                | 28.2  | 29.3   | 30.4   | 31.5   | 32.5    | 33.6    | 34.7   | 35.7    | 36.8    | 37.9   | 39.0    | 40.1    | 41.2   |
| 5                                | 26.6  | 27.6   | 28.6   | 29.6   | 30.6    | 31.6    | 32.7   | 33.7    | 34.7    | 35.7   | 36.7    | 37.8    | 38.8   |
| 6                                | 25.0  | 25.9   | 26.9   | 27.8   | 28.8    | 29.7    | 30.6   | 31.6    | 32.6    | 33.5   | 34.5    | 35.4    | 36.4   |
| 7                                | 23.3  | 24.2   | 25.1   | 26.0   | 26.9    | 27.8    | 28.6   | 29.5    | 30.4    | 31.3   | 32.3    | 33.1    | 34.0   |
| 8                                | 21.7  | 22.5   | 23.3   | 24.2   | 25.0    | 25.8    | 26.6   | 27.5    | 28.3    | 29.1   | 30.0    | 30.8    | 31.6   |
| 9                                | 20.0  | 20.8   | 21.6   | 22.3   | 23.1    | 23.9    | 24.6   | 25.4    | 26.2    | 26.9   | 27.7    | 28.5    | 29.2   |
| 10                               | 18.4  | 19.1   | 19.8   | 20.5   | 21.2    | 21.9    | 22.6   | 23.3    | 24.0    | 24.7   | 25.4    | 26.1    | 26.9   |
| 11                               | 16.8  | 17.4   | 18.0   | 18.7   | 19.3    | 20.0    | 20.6   | 21.2    | 21.9    | 22.5   | 23.2    | 23.8    | 24.5   |
| 27 0                             | 15.1  | 15.7   | 16.3   | 16.9   | 17.4    | 18.0    | 18.6   | 19.2    | 19.7    | 20.3   | 20.9    | 21.5    | 22.1   |
| 1                                | 13.5  | 14.0   | 14.5   | 15.0   | 15.5    | 16.1    | 16.6   | 17.1    | 17.6    | 18.1   | 18.6    | 19.2    | 19.7   |
| 2                                | 11.9  | 12.3   | 12.8   | 13.2   | 13.7    | 14.1    | 14.6   | 15.0    | 15.5    | 15.9   | 16.4    | 16.9    | 17.3   |
| 3                                | 10.2  | 10.6   | 11.0   | 11.4   | 11.8    | 12.2    | 12.6   | 12.9    | 13.3    | 13.7   | 14.1    | 14.5    | 14.9   |
| 4                                | 8.6   | 8.9    | 9.2    | 9.6    | 9.9     | 10.2    | 10.5   | 10.9    | 11.2    | 11.5   | 11.9    | 12.2    | 12.5   |
| 5                                | 6.9   | 7.2    | 7.5    | 7.7    | 8.0     | 8.3     | 8.5    | 8.8     | 9.1     | 9.3    | 9.6     | 9.9     | 10.1   |
| 6                                | 5.3   | 5.5    | 5.7    | 5.9    | 6.1     | 6.3     | 6.5    | 6.7     | 6.9     | 7.1    | 7.3     | 7.5     | 7.7    |
| 7                                | 3.7   | 3.8    | 4.0    | 4.1    | 4.2     | 4.4     | 4.5    | 4.6     | 4.8     | 4.9    | 5.1     | 5.2     | 5.4    |
| 8                                | 2.0   | 2.1    | 2.2    | 2.3    | 2.3     | 2.4     | 2.5    | 2.6     | 2.7     | 2.7    | 2.8     | 2.9     | 3.0    |
| 9                                | 0.4   | 0.4    | 0.4    | 0.4    | 0.5     | 0.5     | 0.5    | 0.5     | 0.5     | 0.5    | 0.5     | 0.6     | 0.6    |
| 10                               | +     | +      | +      | +      | +       | +       | +      | +       | +       | +      | +       | +       | +      |
| 11                               | 1.2   | 1.3    | 1.3    | 1.4    | 1.4     | 1.5     | 1.5    | 1.6     | 1.6     | 1.7    | 1.7     | 1.8     | 1.8    |
| 28 0                             | 2.9   | 3.0    | 3.1    | 3.2    | 3.3     | 3.4     | 3.5    | 3.6     | 3.8     | 3.9    | 4.0     | 4.1     | 4.2    |
| 1                                | 6.2   | 6.4    | 6.6    | 6.9    | 7.1     | 7.3     | 7.6    | 7.8     | 8.0     | 8.3    | 8.5     | 8.7     | 9.0    |
| 2                                | 7.8   | 8.1    | 8.4    | 8.7    | 9.0     | 9.3     | 9.6    | 9.9     | 10.2    | 10.5   | 10.8    | 11.1    | 11.4   |
| 3                                | 9.4   | 9.8    | 10.1   | 10.5   | 10.9    | 11.2    | 11.6   | 11.9    | 12.3    | 12.7   | 13.0    | 13.4    | 13.8   |
| 4                                | 11.1  | 11.5   | 11.9   | 12.3   | 12.8    | 13.2    | 13.6   | 14.0    | 14.4    | 14.9   | 15.3    | 15.7    | 16.2   |
| 5                                | 12.7  | 13.2   | 13.7   | 14.2   | 14.6    | 15.1    | 15.6   | 16.1    | 16.6    | 17.1   | 17.6    | 18.1    | 18.5   |
| 6                                | 14.3  | 14.9   | 15.4   | 16.0   | 16.5    | 17.1    | 17.6   | 18.2    | 18.7    | 19.3   | 19.8    | 20.4    | 20.9   |
| 7                                | 16.0  | 16.6   | 17.2   | 17.8   | 18.4    | 19.0    | 19.6   | 20.2    | 20.9    | 21.5   | 22.1    | 22.7    | 23.3   |
| 8                                | 17.6  | 18.3   | 19.0   | 19.6   | 20.3    | 21.0    | 21.6   | 22.3    | 23.0    | 23.7   | 24.4    | 25.0    | 25.7   |
| 9                                | 19.3  | 20.0   | 20.7   | 21.5   | 22.2    | 22.9    | 23.7   | 24.4    | 25.1    | 25.9   | 26.6    | 27.4    | 28.1   |
| 10                               | 20.9  | 21.7   | 22.5   | 23.3   | 24.1    | 24.9    | 25.7   | 26.5    | 27.3    | 28.1   | 28.9    | 29.7    | 30.5   |
| 11                               | 22.5  | 23.4   | 24.2   | 25.1   | 26.0    | 26.8    | 27.7   | 28.5    | 29.4    | 30.3   | 31.1    | 32.0    | 32.9   |
| 29 0                             | 24.2  | 25.1   | 26.0   | 26.9   | 27.8    | 28.8    | 29.7   | 30.6    | 31.6    | 32.5   | 33.4    | 34.3    | 35.3   |
| 1                                | 25.8  | 26.8   | 27.8   | 28.8   | 29.7    | 30.7    | 31.7   | 32.7    | 33.7    | 34.7   | 35.7    | 36.7    | 37.7   |
| 2                                | 27.5  | 28.5   | 29.5   | 30.6   | 31.6    | 32.7    | 33.7   | 34.8    | 35.8    | 36.9   | 37.9    | 39.0    | 40.1   |

Before using the table, a correction is required for the height of the barometer. This correction depends upon the attached thermometer, and is taken with the argument  $t-t'$  from the small table at p. 564.



ARGUMENTS: CORRECTED BAROMETER<sup>1</sup>) AND MEAN REFRACTION CORRECTED  
FOR TEMPERATURE BY TAB. II.

| MEAN REFRACTION + CORR. TAB. II. |         |        |         |         |        |         |         |        |         |         |        |
|----------------------------------|---------|--------|---------|---------|--------|---------|---------|--------|---------|---------|--------|
| 13° 20'                          | 13° 40' | 14° 0' | 14° 20' | 14° 40' | 15° 0' | 15° 20' | 15° 40' | 16° 0' | 16° 20' | 16° 40' | 17° 0' |
| 44.8                             | 45.9    | 47.1   | 48.2    | 49.4    | 50.5   | 51.7    | 52.9    | 54.1   | 55.3    | 56.4    | 57.6   |
| 43.3                             | 44.4    | 45.5   | 46.7    | 47.8    | 48.9   | 50.0    | 51.1    | 52.2   | 53.4    | 54.5    | 55.6   |
| 39.8                             | 40.9    | 41.9   | 42.9    | 44.0    | 45.0   | 46.1    | 47.1    | 48.2   | 49.2    | 50.3    | 51.3   |
| 37.4                             | 38.4    | 39.3   | 40.3    | 41.3    | 42.3   | 43.2    | 44.2    | 45.2   | 46.2    | 47.2    | 48.2   |
| 34.9                             | 35.8    | 36.7   | 37.6    | 38.6    | 39.5   | 40.4    | 41.3    | 42.4   | 43.2    | 44.1    | 45.0   |
| 32.5                             | 33.3    | 34.2   | 35.0    | 35.9    | 36.7   | 37.6    | 38.4    | 39.3   | 40.1    | 41.0    | 41.8   |
| 30.0                             | 30.8    | 31.6   | 32.4    | 33.1    | 33.9   | 34.7    | 35.5    | 36.3   | 37.1    | 37.9    | 38.7   |
| 27.6                             | 28.3    | 29.0   | 29.7    | 30.4    | 31.2   | 31.9    | 32.6    | 33.3   | 34.1    | 34.8    | 35.5   |
| 25.1                             | 25.8    | 26.4   | 27.1    | 27.7    | 28.4   | 29.0    | 29.7    | 30.4   | 31.0    | 31.7    | 32.4   |
| 22.7                             | 23.3    | 23.8   | 24.4    | 25.0    | 25.6   | 26.2    | 26.8    | 27.4   | 28.0    | 28.6    | 29.2   |
| 20.2                             | 20.7    | 21.3   | 21.8    | 22.3    | 22.8   | 23.4    | 23.9    | 24.4   | 25.0    | 25.5    | 26.0   |
| 17.8                             | 18.2    | 18.7   | 19.2    | 19.6    | 20.1   | 20.5    | 21.0    | 21.5   | 21.9    | 22.4    | 22.9   |
| 15.3                             | 15.7    | 16.1   | 16.5    | 16.9    | 17.3   | 17.7    | 18.1    | 18.5   | 18.9    | 19.3    | 19.7   |
| 12.9                             | 13.2    | 13.5   | 13.9    | 14.2    | 14.5   | 14.9    | 15.2    | 15.5   | 15.9    | 16.2    | 16.6   |
| 10.4                             | 10.7    | 10.9   | 11.2    | 11.5    | 11.8   | 12.0    | 12.3    | 12.6   | 12.9    | 13.1    | 13.4   |
| 7.9                              | 8.2     | 8.4    | 8.6     | 8.8     | 9.0    | 9.2     | 9.4     | 9.6    | 9.8     | 10.0    | 10.2   |
| 5.5                              | 5.6     | 5.8    | 5.9     | 6.1     | 6.2    | 6.4     | 6.5     | 6.6    | 6.8     | 6.9     | 7.1    |
| 3.1                              | 3.1     | 3.2    | 3.3     | 3.4     | 3.4    | 3.5     | 3.6     | 3.7    | 3.8     | 3.8     | 3.9    |
| 0.6                              | 0.6     | 0.6    | 0.6     | 0.7     | 0.7    | 0.7     | 0.7     | 0.7    | 0.7     | 0.7     | 0.8    |
| +                                | +       | +      | +       | +       | +      | +       | +       | +      | +       | +       | +      |
| 1.9                              | 1.9     | 2.0    | 2.0     | 2.1     | 2.1    | 2.2     | 2.2     | 2.3    | 2.3     | 2.4     | 2.4    |
| 4.3                              | 4.4     | 4.5    | 4.6     | 4.8     | 4.9    | 5.0     | 5.1     | 5.2    | 5.3     | 5.5     | 5.6    |
| 6.8                              | 6.9     | 7.1    | 7.3     | 7.5     | 7.7    | 7.8     | 8.0     | 8.2    | 8.4     | 8.5     | 8.7    |
| 9.2                              | 9.3     | 9.7    | 9.9     | 10.2    | 10.4   | 10.7    | 10.9    | 11.2   | 11.4    | 11.6    | 11.9   |
| 11.7                             | 12.0    | 12.3   | 12.6    | 12.9    | 13.2   | 13.5    | 13.8    | 14.1   | 14.4    | 14.7    | 15.1   |
| 14.1                             | 14.5    | 14.9   | 15.2    | 15.6    | 16.0   | 16.3    | 16.7    | 17.1   | 17.5    | 17.8    | 18.2   |
| 16.6                             | 17.0    | 17.5   | 17.9    | 18.3    | 18.8   | 19.2    | 19.6    | 20.1   | 20.5    | 20.9    | 21.4   |
| 19.0                             | 19.5    | 20.0   | 20.5    | 21.0    | 21.5   | 22.0    | 22.5    | 23.0   | 23.5    | 24.0    | 24.5   |
| 21.5                             | 22.1    | 22.6   | 23.2    | 23.7    | 24.3   | 24.9    | 25.4    | 26.0   | 26.6    | 27.1    | 27.7   |
| 23.9                             | 24.6    | 25.2   | 25.8    | 26.4    | 27.1   | 27.7    | 28.3    | 29.0   | 29.6    | 30.2    | 30.9   |
| 26.4                             | 27.1    | 27.8   | 28.5    | 29.2    | 29.8   | 30.5    | 31.2    | 31.9   | 32.6    | 33.3    | 34.0   |
| 28.8                             | 29.6    | 30.4   | 31.1    | 31.9    | 32.6   | 33.4    | 34.1    | 34.9   | 35.7    | 36.4    | 37.2   |
| 31.3                             | 32.1    | 32.9   | 33.8    | 34.6    | 35.4   | 36.2    | 37.0    | 37.9   | 38.7    | 39.5    | 40.4   |
| 33.8                             | 34.6    | 35.5   | 36.4    | 37.3    | 38.2   | 39.1    | 40.0    | 40.8   | 41.7    | 42.6    | 43.5   |
| 36.2                             | 37.2    | 38.1   | 39.0    | 40.0    | 40.9   | 41.9    | 42.9    | 43.8   | 44.8    | 45.7    | 46.7   |
| 38.7                             | 39.7    | 40.7   | 41.7    | 42.7    | 43.7   | 44.7    | 45.8    | 46.8   | 47.8    | 48.8    | 49.9   |
| 41.1                             | 42.2    | 43.3   | 44.3    | 45.4    | 46.5   | 47.6    | 48.7    | 49.7   | 50.8    | 51.9    | 53.0   |

Example:

App. Alt.  $11^{\circ} 18' 0''$   
Barom. 28.31 Engl.  
Therm. external  $85^{\circ}$  Fh.  
" attached 70

Reduction (see p. 563.)  
Barom. 28.25 . . . 26.6 .68

Therm.  $85^{\circ} = 83.75 + 1.25 = 23^{\circ} + 0.44$

$23^{\circ} 55' = 23.6 = t$   
 $16^{\circ} 0.89 = 16.9 = t'$

$t - t' = + 6^{\circ} 7' \text{ Corr. } + 0^{\circ} .46$   
Corr. Bar. 26.7 .14

Tab. I. App. Alt.  $11^{\circ} 18' 0''$  . . .  $4' 41'' .0$   
" II. M. ref.  $4' 41''$  . . .  $- 20 .5$   
Therm.  $+ 23^{\circ} .6$   
" III. M. ref.  $+ \text{Tab. II. } 4' 21''$  . . .  $- 11 .0$   
Corr. Bar. 26.7 .14  
Refraction . . . .  $4' 9'' .5$



## CONSTANTS.

|   |                           | log.       |
|---|---------------------------|------------|
| Base of Napierian logarithms            | $e = 2.7182818$           | 0.4342945  |
| Log. $e$ - Modular of common logarithms | $M = 0.4342945$           | 9.6389364  |
| Radius reduced to seconds               | $R = 3937.373$            | 3.5963498  |
| " " " minutes                           | $R' = 147.096$            | 2.1673219  |
| " " " degrees                           | $R'' = 2.44808$           | 0.3891666  |
| 160 degrees expressed in seconds        | $S = 576000$              | 5.7592125  |
| " " " minutes                           | $S' = 9600$               | 3.9820935  |
| " " " degrees                           | $S'' = 160$               | 2.2041199  |
| Diameter of the sun                     | $D = 864,000$             | 5.9360913  |
| " " " distance                          | $d = 214,939,000$         | 8.3320650  |
| " " " radius                            | $r = 107,469,500$         | 7.0310325  |
| " " " volume                            | $v = 4,851,626,000,000$   | 12.6864425 |
| " " " mass                              | $m = 332,946,000,000,000$ | 14.5201125 |
| " " " attraction                        | $a = 34.433$              | 1.5370350  |

## Dimensions of the Earth according to Hucal.

|                         |                  |           |
|-------------------------|------------------|-----------|
| Semi-axis major         | $a = 3956.571$   | 3.5981311 |
| Semi-axis minor         | $b = 3950.125$   | 3.5973174 |
| $a$ in English feet     | $a' = 20925827$  | 7.3203501 |
| $b$ " " "               | $b' = 20911112$  | 7.3198601 |
| $a$ in English miles    | $a'' = 7596.564$ | 3.8800524 |
| $b$ " " "               | $b'' = 7590.125$ | 3.8795624 |
| Ellipticity of meridian | $e = 0.00335$    | 2.5250312 |

|                          |                |           |
|--------------------------|----------------|-----------|
| Excentricity of meridian | $e' = 0.00335$ | 2.5250312 |
|--------------------------|----------------|-----------|

## Horizontal equatorial parallax of the Sun according to Hucal.

|                                    |                   |           |
|------------------------------------|-------------------|-----------|
| Distance of the Earth from the Sun | $d = 214,939,000$ | 8.3320650 |
| Year according to Hucal            | $y = 365.256$     | 2.5625625 |
| and Hucal                          | $y' = 365.256$    | 2.5625625 |
| Perseus according to Hucal         | $p = 365.256$     | 2.5625625 |
| " " " Hucal                        | $p' = 365.256$    | 2.5625625 |

|                    |                |           |
|--------------------|----------------|-----------|
| Equatorial (Hucal) | $e = 0.00335$  | 2.5250312 |
| perseus (Hucal)    | $p = 365.256$  | 2.5625625 |
| and Hucal          | $p' = 365.256$ | 2.5625625 |

## Aberration according to Hucal.

|                               |                |           |
|-------------------------------|----------------|-----------|
| Aberration according to Hucal | $a = 0.00335$  | 2.5250312 |
| " " " Hucal                   | $a' = 0.00335$ | 2.5250312 |
| Notation                      | $n = 0.00335$  | 2.5250312 |
| " " " Hucal                   | $n' = 0.00335$ | 2.5250312 |

## Abundance of the Sun, the Moon, and the Earth.

|   |                    |           |
|---|--------------------|-----------|
| Light is propagated from the Sun to the Earth | $l = 214,939,000$  | 8.3320650 |
| the Sun to the Earth                          | $l' = 214,939,000$ | 8.3320650 |
| Velocity of light                             | $v = 186,282$      | 5.2702085 |

## Masses of the Planets, the Sun, and the Earth.

|       |               |         |         |                |         |
|-------|---------------|---------|---------|----------------|---------|
| Mars  | $m = 0.00033$ | (Hucal) | Jupiter | $j = 0.00095$  | (Hucal) |
| Venus | $v = 0.00025$ | (Hucal) | Mercury | $m' = 0.00005$ | (Hucal) |
| Earth | $e = 0.00059$ | (Hucal) | Neptune | $n = 0.00001$  | (Hucal) |
| Mars  | $m = 0.00033$ | (Hucal) | Uranus  | $u = 0.00002$  | (Hucal) |

## Mass of the Sun, the Moon, and the Earth.

|                       |               |           |
|-----------------------|---------------|-----------|
| Attraction of the Sun | $a = 34.433$  | 1.5370350 |
| according to Hucal    | $a' = 34.433$ | 1.5370350 |



# AUXILIARY TABLE.

| S          | Arc.   | log. sin. | T          | Arc.   | log. tang. |
|------------|--------|-----------|------------|--------|------------|
| 4.685 5749 | 1' 39" | 6.681     | 4.685 5749 | 2' 36" | 6.879      |
| 5748       | 3 18   | 6.982     | 5750       | 3 18   | 6.982      |
| 5747       | 5 13   | 7.181     | 5751       | 4 22   | 7.104      |
| 5746       | 6 36   | 7.483     | 5752       | 5 13   | 7.181      |
| 5745       | 7 44   | 7.752     | 5753       | 5 57   | 7.228      |
| 4.685 5744 | 8 44   | 7.405     | 5754       | 6 36   | 7.283      |
| 5743       | 9 37   | 7.447     | 4.685 5755 | 7 11   | 7.320      |
| 5742       | 10 26  | 7.482     | 5756       | 7 44   | 7.352      |
| 5741       | 11 11  | 7.512     | 5757       | 8 15   | 7.380      |
| 5740       | 11 54  | 7.539     | 5758       | 8 44   | 7.405      |
| 4.685 5739 | 12 34  | 7.564     | 5759       | 9 11   | 7.427      |
| 5738       | 13 12  | 7.584     | 4.685 5760 | 9 37   | 7.447      |
| 5737       | 13 48  | 7.604     | 5761       | 10 2   | 7.465      |
| 5736       | 14 23  | 7.622     | 5762       | 10 26  | 7.482      |
| 5735       | 14 56  | 7.638     | 5763       | 10 49  | 7.498      |
| 4.685 5734 | 15 28  | 7.653     | 5764       | 11 11  | 7.512      |
| 5733       | 16 0   | 7.668     | 4.685 5765 | 11 33  | 7.526      |
| 5732       | 16 10  | 7.681     | 5766       | 11 54  | 7.539      |
| 5731       | 16 59  | 7.694     | 5767       | 12 14  | 7.551      |
| 5730       | 17 28  | 7.706     | 5768       | 12 34  | 7.563      |
| 4.685 5729 | 17 56  | 7.717     | 5769       | 12 53  | 7.574      |
| 5728       | 18 22  | 7.728     | 4.685 5770 | 13 12  | 7.584      |
| 5727       | 18 48  | 7.738     | 5771       | 13 30  | 7.594      |
| 5726       | 19 14  | 7.748     | 5772       | 13 48  | 7.604      |
| 5725       | 19 39  | 7.757     | 5773       | 14 6   | 7.613      |
| 4.685 5724 | 20 4   | 7.766     | 5774       | 14 23  | 7.622      |
| 5723       | 20 28  | 7.775     | 4.685 5775 | 14 40  | 7.630      |
| 5722       | 20 52  | 7.783     | 5776       | 14 56  | 7.638      |
| 5721       | 21 15  | 7.791     | 5777       | 15 13  | 7.646      |
| 5720       | 21 38  | 7.799     | 5778       | 15 29  | 7.654      |
| 4.685 5719 | 22 1   | 7.806     | 5779       | 15 44  | 7.661      |
| 5718       | 22 21  | 7.814     | 4.685 5780 | 16 0   | 7.668      |
| 5717       | 22 41  | 7.820     | 5781       | 16 15  | 7.675      |
| 5716       | 23 6   | 7.827     | 5782       | 16 30  | 7.681      |
| 5715       | 23 22  | 7.834     | 5783       | 16 44  | 7.687      |
| 4.685 5714 | 23 47  | 7.840     | 5784       | 16 59  | 7.694      |
| 5713       | 24 8   | 7.846     | 4.685 5785 | 17 13  | 7.700      |
| 5712       | 24 28  | 7.852     | 5786       | 17 27  | 7.706      |
| 5711       | 24 48  | 7.858     | 5787       | 17 41  | 7.711      |
| 5710       | 25 8   | 7.864     | 5788       | 17 55  | 7.717      |
| 4.685 5709 | 25 27  | 7.869     | 5789       | 18 9   | 7.723      |
| 5708       | 25 46  | 7.875     | 4.685 5790 | 18 22  | 7.728      |
| 5707       | 26 5   | 7.880     | 5791       | 18 35  | 7.733      |
| 5706       | 26 24  | 7.885     | 5792       | 18 49  | 7.738      |
| 5705       | 26 42  | 7.890     | 5793       | 19 2   | 7.743      |
| 4.685 5704 | 27 0   | 7.895     | 5794       | 19 14  | 7.748      |
| 5703       | 27 18  | 7.900     | 4.685 5795 | 19 27  | 7.753      |
| 5702       | 27 36  | 7.905     | 5796       | 19 39  | 7.757      |
| 5701       | 27 54  | 7.909     | 5797       | 19 52  | 7.762      |
| 5700       | 28 11  | 7.914     | 5798       | 20 4   | 7.766      |
| 4.685 5699 | 28 29  | 7.918     | 5799       | 20 16  | 7.771      |
| 5698       | 28 46  | 7.923     | 4.685 5800 | 20 28  | 7.775      |
| 5697       | 29 3   | 7.927     | 5810       | 22 23  | 7.814      |
| 5696       | 29 19  | 7.931     | 5820       | 24 8   | 7.846      |
| 5695       | 29 36  | 7.935     | 5830       | 25 46  | 7.875      |
| 4.685 5694 | 29 53  | 7.939     | 5840       | 27 19  | 7.900      |
| 5693       | 30 9   | 7.943     | 4.685 5850 | 28 46  | 7.923      |
| 5692       | 30 25  | 7.947     | 5860       | 30 0   | 7.943      |
| 5691       | 30 41  | 7.951     | 5870       | 31 28  | 7.962      |
| 5690       | 30 57  | 7.954     | 5880       | 32 46  | 7.979      |
| 4.685 5680 | 31 29  | 7.988     | 5890       | 33 58  | 7.995      |
| 5670       | 31 50  | 8.018     | 5900       | 35 9   | 8.010      |